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=> FILE HCAP
FILE 'HCAPLUS' ENTERED AT 15:00:02 ON 06 FEB 2012
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=> D HIS NOFILE

     FILE 'HCAPLUS' ENTERED AT 10:11:57 ON 06 FEB 2012
                  E US2006-585132/APPS
L1             1 SEA US2006-585132/AP
                  SEL L1 RN

     FILE 'REGISTRY' ENTERED AT 10:13:20 ON 06 FEB 2012
L2             1 SEA 9005-32-7/BI

     FILE 'HCAPLUS' ENTERED AT 10:15:48 ON 06 FEB 2012
                  E STEIGER D/AU
L3            54 SEA "STEIGER D"/AU OR "STEIGER DANIEL"/AU
                  E STOFFELS I/AU
L4             1 SEA "STOFFELS I"/AU
                  E KNICKREHA I/AU
L5             0 SEA KNICKREHM/AU
L6            55 SEA L3 OR L4
                  E DEGUSSA TEXTURANT/CO
L7             9 SEA ("DEGUSSA TEXTURANT SYSTEMS DEUTSCHLAND G M B H CO K
                  G"/CO,CS,PA OR "DEGUSSA TEXTURANT SYSTEMS FRANCE S A S"/CO,CS,P
                  E LECITHIN
L8         36087 SEA LECITHIN/BI
                  E ALGINATE
L9         37444 SEA ALGINATE/BI
L10          281 SEA L8 AND L9

     FILE 'ZCA' ENTERED AT 10:47:13 ON 06 FEB 2012
L11               QUE (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                  OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L12               QUE (COAT? OR SPRAY? OR COVER? OR OVERLAY? OR LAMINAT? OR
                  OVERCOAT? OR OVERSPREAD?)

     FILE 'HCAPLUS' ENTERED AT 10:49:29 ON 06 FEB 2012
L13      3400313 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                  OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L14       183175 SEA L12 (5A) L13

     FILE 'REGISTRY' ENTERED AT 10:54:22 ON 06 FEB 2012
                  E 9005-32-7/RN
L15            1 SEA 9005-32-7/RN
L16        17739 SEA L15
L17        53686 SEA L8 OR L16

     FILE 'HCAPLUS' ENTERED AT 11:06:40 ON 06 FEB 2012
L18        36087 SEA L8 AND L17
L19          458 SEA L14 AND L18
L20        17341 SEA ANIMAL (2A) FEED?
L21            6 SEA L20 AND L19

     FILE 'REGISTRY' ENTERED AT 13:01:48 ON 06 FEB 2012
                  E ALGINIC ACID/CN
L22            1 SEA "ALGINIC ACID"/CN
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                SEL L22 RN
                EDIT E1 /BI /CRN
L23         273 SEA 9005-32-7/CRN OR L22

    FILE 'HCAPLUS' ENTERED AT 13:37:53 ON 06 FEB 2012
L24       19209 SEA L23
L25       47529 SEA ALGINAT? OR ALGINIC?
L26       48000 SEA L25 OR L24
L27       51064 SEA LECITHIN?
L28        1072 SEA L26 AND L27
L29          70 SEA L14 AND L28
L30             QUE (FOOD? OR FEED?)/SC,SX
L31          27 SEA L29 AND L30
L32          31 SEA L21 OR L31
L33           0 SEA L32 AND (L6 OR L7)
L34           0 SEA L29 AND (L6 OR L7)
L35           3 SEA L29 AND INSTANT?
L36          15 SEA 1802-2005/PY,PRY,AY AND L32

    FILE 'WPIX' ENTERED AT 14:02:48 ON 06 FEB 2012
L37     1556547 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L38      153347 SEA L12 (5A) L37
L39       10642 SEA D03-G01/MC
L40       35079 SEA A23K0001?/IPC
L41       14553 SEA LECITHIN?
L42       22602 SEA ALGINAT? OR ALGINIC?
L43         940 SEA L41 AND L42
L44          84 SEA L38 AND L43
L45           9 SEA L39 AND L38 AND L41
L46          49 SEA L40 AND L38 AND L41
L47          12 SEA L39 AND L38 AND L42
L48          46 SEA L40 AND L38 AND L42
L49          17 SEA L45 OR L47
L50          89 SEA L46 OR L48
L51           6 SEA L46 AND L48
L52          22 SEA L49 OR L51
L53           9 SEA L43 AND L39
L54          38 SEA L43 AND L40
L55          14 SEA L51 OR L53
L56          13 SEA L49 NOT L55
L57          28 SEA L54 NOT (L55 OR L56)
L58           5 SEA L53 AND L54
L59           0 SEA L58 NOT (L55 OR L56)
L60           6 SEA 1801-2005/PY,PRY,AY AND L55
L61          10 SEA 1801-2005/PY,PRY,AY AND L56
L62           1 SEA L60 AND (L6 OR L7)
L63           0 SEA L61 AND (L6 OR L7)
L64           5 SEA L60 NOT L62
L65          25 SEA 1801-2005/PY,PRY,AY AND L57
L66           0 SEA L65 AND (L6 OR L7)

    FILE 'HCAPLUS' ENTERED AT 14:38:53 ON 06 FEB 2012

    FILE 'WPIX' ENTERED AT 14:39:19 ON 06 FEB 2012
L67             TRA L64 1- PN APPS :      34 TERMS

    FILE 'HCAPLUS' ENTERED AT 14:39:20 ON 06 FEB 2012
L68           5 SEA L67
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     FILE 'WPIX' ENTERED AT 14:39:45 ON 06 FEB 2012
L69              TRA L61 1- PN APPS :     164 TERMS

     FILE 'HCAPLUS' ENTERED AT 14:39:47 ON 06 FEB 2012
L70           11 SEA L69
L71           15 SEA L36 NOT (L68 OR L70)

     FILE 'AGRICOLA, ESBIOBASE, FSTA, FROSTI, LIFESCI' ENTERED AT 14:41:45 ON
     06 FEB 2012
L72         1239 SEA LECITHIN?
L73         2021 SEA LECITHIN?
L74         3360 SEA LECITHIN?
L75         2970 SEA LECITHIN?
L76         3108 SEA LECITHIN?
     TOTAL FOR ALL FILES
L77        12698 SEA LECITHIN?
L78         2316 SEA ALGINAT? OR ALGINIC?
L79         4326 SEA ALGINAT? OR ALGINIC?
L80         3695 SEA ALGINAT? OR ALGINIC?
L81         2901 SEA ALGINAT? OR ALGINIC?
L82         5765 SEA ALGINAT? OR ALGINIC?
     TOTAL FOR ALL FILES
L83        19003 SEA ALGINAT? OR ALGINIC?
L84       131196 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                 OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L85       228129 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                 OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L86        79849 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                 OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L87        56041 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                 OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
L88       192921 SEA (POWDER? OR PARTICL? OR PARTICULAT? OR GRANUL? OR FINES#
                 OR FLAKE# OR PELLET? OR GRAIN# OR MICROPARTICL?)
     TOTAL FOR ALL FILES
L89       688136 SEA L11
L90         1618 SEA L12 (5A) L84
L91         3101 SEA L12 (5A) L85
L92         3009 SEA L12 (5A) L86
L93         2416 SEA L12 (5A) L87
L94         3294 SEA L12 (5A) L88
     TOTAL FOR ALL FILES
L95        13438 SEA L12 (5A) L89
L96            0 SEA L72 AND L78 AND L90
L97            0 SEA L73 AND L79 AND L91
L98            2 SEA L74 AND L80 AND L92
L99            4 SEA L75 AND L81 AND L93
L100           0 SEA L76 AND L82 AND L94
     TOTAL FOR ALL FILES
L101           6 SEA L77 AND L83 AND L95
                 D SCAN
L102           0 SEA L96 AND (L6 OR L7)
L103           0 SEA L97 AND (L6 OR L7)
L104           1 SEA L98 AND (L6 OR L7)
L105           2 SEA L99 AND (L6 OR L7)
L106           0 SEA L100 AND (L6 OR L7)
     TOTAL FOR ALL FILES
L107           3 SEA L101 AND (L6 OR L7)
                 D SCAN
L108           0 SEA L96 NOT L102
L109           0 SEA L97 NOT L103
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L110          1 SEA L98 NOT L104
L111          2 SEA L99 NOT L105
L112          0 SEA L100 NOT L106
    TOTAL FOR ALL FILES
L113          3 SEA L101 NOT L107
                D SCAN
L114          3 DUP REM L107 (0 DUPLICATES REMOVED)
                    ANSWER '1' FROM FILE FSTA
                    ANSWERS '2-3' FROM FILE FROSTI

=> FILE WPIX
FILE 'WPIX' ENTERED AT 15:00:33 ON 06 FEB 2012
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=> D L62 IFULL

L62  ANSWER 1 OF 1  WPIX COPYRIGHT 2012       THOMSON REUTERS on STN
ACCESSION NUMBER:      2006-196613 [200621]   WPIX
DOC. NO. CPI:          C2006-065490 [200621]
TITLE:                 Production of readily wettable, instantized powder for
                       use in foods or feeds, by spraying
                       particles having free surface fat, especially
                       based on coconut milk, with lecithin and
                       alginate in water then drying
DERWENT CLASS:         D13
INVENTOR:              KNICKREHM I; NICHOREME I; STEIGER D;
                       STOFFELS I; DANIEL S
PATENT ASSIGNEE:       (CRGI-C) CARGILL TEXTURIZING SOLUTIONS DEUT GMBH;
                       (DEGS-C) DEGUSSA TEXTURANT SYSTEMS DEUT GMBH & CO;
                       (KNIC-I) KNICKREHM I; (STEI-I) STEIGER D; (STOF-I)
                       STOFFELS I; (DEGS-C) DEGUSSA TEXTURANT SYSTEMS DEUT
                       GMBH&CO
COUNTRY COUNT:         110

PATENT INFORMATION:

      PATENT NO      KIND DATE     WEEK     LA  PG          MAIN IPC
      ------------------------------------------------------------------
      DE 102004038910 A1 20060302 (200621)* DE  3[0]
      WO 2008009297   A1 20080124 (200810)  DE
      EP 1901614      A1 20080326 (200825)  DE
      CN 101188945    A  20080528 (200853)  ZH
      EP 1901614      B1 20090513 (200933)  DE
      DE 502005007295 G  20090625 (200942)  DE
      US 20090175990  A1 20090709 (200946)  EN
      ES 2325216      T3 20090828 (201003)  ES
      PH 12006500937  B1 20110408 (201170)  EN

APPLICATION DETAILS:

      PATENT NO      KIND                  APPLICATION    DATE
      ------------------------------------------------------------------
      DE 102004038910 A1                   DE 2004-102004038910
           20040811
      CN 101188945 A                       CN 2005-80001447 20050809
      DE 502005007295 G                    DE 2005-502005007295
           20050809
      EP 1901614 A1                        EP 2005-787243 20050809
      EP 1901614 B1                        EP 2005-787243 20050809
      DE 502005007295 G                    EP 2005-787243 20050809
```

ES 2325216 T3	EP 2005-767242	20050809
WO 2008009297 A1	WO 2005-EP8631	20050809
EP 1901614 A1	WO 2005-EP8631	20050809
CN 101188945 A	WO 2005-EP8631	20050809
EP 1901614 B1 PCT Application	WO 2005-EP8631	20050809
DE 502005007295 G PCT Application	WO 2005-EP8631	20050809
US 20090175990 A1 PCT Application	WO 2005-EP8631	20050809
US 20090175990 A1	US 2006-585132	20060630
PH 12006500937 B1	PH 2006-500937	20060510

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 502005007295 G	Based on	EP 1901614 A
EP 1901614 A1	Based on	WO 2008009297 A
CN 101188945 A	Based on	WO 2008009297 A
EP 1901614 B1	Based on	WO 2008009297 A
DE 502005007295 G	Based on	WO 2008009297 A
ES 2325216 T3	Based on	EP 1901614 A

PRIORITY APPLN. INFO: DE 2004-102004038910 20040811
INT. PATENT CLASSIF.:

MAIN:	A23C0011-10
SECONDARY:	A23C0009-16; A23L0001-00; A23L0001-36
IPC ORIGINAL:	A23C0011-10 [I,A]; A23C0009-00 [I,C]; A23C0009-00 [I,C]; A23C0009-16 [I,A]; A23C0009-16 [I,A]; A23P0001-00 [I,A]; A23L0001-00 [I,A]; A23L0001-00 [I,A]; A23L0001-00 [I,A]; A23L0001-00 [I,C]; A23L0001-00 [I,C]; A23L0001-00 [I,C]; A23L0001-0532 [I,A]; A23L0001-36 [I,A]; A23L0001-36 [I,A]; A23L0001-36 [I,C]; A23P0001-02 [I,A]; A23P0001-06 [I,A]; A23C0011-00 [I,C]; A23L0001-00 [I,C]
ECLA:	A23L0001-00P2B; A23L0001-00P4; A23L0001-00P6D; A23L0001-36D
USCLASS NCLM:	426/305.000
NCLS:	426/302.000

BASIC ABSTRACT:

DE 102004038910 A1 UPAB: 20060328

NOVELTY - A method for converting a powder, for use in food or feedstuff production and having free surface fat on the particles , into instant form involves spraying the powder particles with lecithin and alginate in water (or an aqueous liquid), optionally agglomerating the particles and drying.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a variant of the process, in which the particles are sprayed with alginate in water (or an aqueous liquid), agglomerated, dried, sprayed with a dispersion of lecithin in water (or an aqueous liquid) and dried.

USE - Especially for the production of instant coconut milk powder (claimed).

ADVANTAGE - The 'instantized' powders have good wettability, i.e. are wetted by water (or aqueous liquids) in the minimum possible time. They also have good behaviour as regards sinking in water and formation of lump-free dispersions.

TECHNOLOGY FOCUS:

FOOD - Preferred Process:

EXTENSION ABSTRACT:

EXAMPLE - None given in the source material.

FILE SEGMENT: CPI
MANUAL CODE: CPI: D03-H01G; D03-H01L

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=> D L64 1-5 IFULL

L64  ANSWER 1 OF 5  WPIX COPYRIGHT 2012       THOMSON REUTERS on STN
ACCESSION NUMBER:     2006-173280 [200618]   WPIX
DOC. NO. CPI:         C2006-057988 [200618]
TITLE:                Preparation of non-sticky phospholipid granulates, useful
                      as e.g. dietary food, comprises agglomerating powdered
                      phospholipid with water-containing hydrocolloid-based
                      binder; adding, homogenously, powdery separating agent;
                      and drying
DERWENT CLASS:        A96; A97; B05; D13
INVENTOR:             HAESER K; WENK H H
PATENT ASSIGNEE:      (BIOG-N) BIOGHURT BIOGARDE GMBH & CO KG; (BHRT-C) BEHR
                      GMBH&CO
COUNTRY COUNT:        109

PATENT INFORMATION:

      PATENT NO      KIND DATE     WEEK     LA  PG          MAIN IPC
      ------------------------------------------------------------------
      WO 2006015841   A1 20060216 (200618)* DE  20[0]
      DE 102004038442 A1 20060316 (200621)  DE
      ES 2325628      T3 20090910 (201004)  ES

APPLICATION DETAILS:

      PATENT NO      KIND                  APPLICATION    DATE
      ------------------------------------------------------------------
      WO 2006015841 A1                     WO 2005-EP8591 20050802
      DE 102004038442 A1                   DE 2004-102004038442
            20040807
      ES 2325628 T3                        EP 2005-777018 20050810

FILING DETAILS:

      PATENT NO       KIND                  PATENT NO
      ------------------------------------------------------
      ES 2325628 T3         Based on        EP 1789272 A

PRIORITY APPLN. INFO: DE 2004-102004038442 20040807
INT. PATENT CLASSIF.:
            MAIN:       A23J0007-00
      SECONDARY:        A23K0001-00; A23K0001-16; A23P0001-02; A61K0009-20
   IPC ORIGINAL:        A23J0007-00 [I,A]; A23L0001-30 [I,A]; B60H0001-00 [I,A];
                        B60H0001-00 [I,C]; C07F0009-10 [I,A]
ICO:                    K23V0002:00+LEC+ACIT+ALG; K23V0002:00+LEC+ACIT+ALG+MISI;
                        K23V0002:00+LEC+ALG+PHYT+STA; K23V0002:00+LEC+ARAB+STA;
                        K61K0009:16H4; L60H0001:00S95
BASIC ABSTRACT:
            WO 2006015841 A1   UPAB: 20060315
             NOVELTY - Preparing non-sticky phospholipid granulates (I) comprising
      agglomerization of powdered phospholipid (mixture) with 3-20 %, by weight
      (related to the total weight of the mixture) of water containing hydrocolloid-
      based binder; homogeneous addition of powdery separating agent (up to 2 %, by
      weight related to the total weight of the mixture); and subsequent drying of
      the obtained product, is new.
            USE - (I) is useful as dietary food, food supplements, functional foods
      and as additive in the clinical nutrition and in fodder (claimed).
             ADVANTAGE - (I) is non-sticky (claimed) even when stored for long
duration of time.
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TECHNOLOGY FOCUS:

INORGANIC CHEMISTRY - Preferred Components: The powdery separating agent is silicon dioxide (particularly in the form of micro-silica, colloidal or amorphous silicon dioxide, magnesium calcium carbonate, (earth)-alkaline salts of food fatty acids, magnesium oxide, hexacyano ferrate, talc, calcium gluconate, bees-, candelilla- and carnauba- wax or shellac. The amount of the added powdery separating agent is 0.1-2 (preferably 0.5-1) %, by weight.

ORGANIC CHEMISTRY - Preferred Components: The phospholipid component used is phosphatidyl serine, phosphatidyl choline, phosphatidyl ethanolamine, phosphatidyl inositol and/or phosphatidyl glycerin (preferably lecithin). The binder is an alginic acid, alginate, guar flour, carob seed grain flour, gum arabicum, cellulose, carboxymethyl cellulose, modified starch, xanthan, carrageen and/or pectin (preferably used in the form of aqueous solution and thickened condition). The binder (containing 5-15 (preferably 8-12) %, by weight of binder portion) is added in the form of an aqueous solution or suspension. The binder-component comprises a hydrocolloid content of 1-50 (preferably 5-25) %, by weight. The physiologically active additives are at least a vitamin, amino acid, phytosterol, triglyceride, fatty acid, tocopherol, tocotrienol are added, pre, pro- and symbiotic and natural components (particularly vegetable extracts) and the formulation auxiliary agent is flavorants, colorants and texturant. The granulate has an average particle size of 500-5000 (preferably 1000-3000) microns.

Preferred Method: The agglomerization is carried out in a mixer (preferably in a high-speed mixer) with 100-5000 U/minute. The silicon dioxide-component is added under mixing. The product is dried at 30-70 degreesC (preferably at 50 degreesC). The drying step is carried out and/or in presence of an inert gas stream. In the agglomerization and homogenous addition step, further additives in the form of physiologically active components and formulation auxiliary agents are added. The resulting precipitate of upper- and/or lower grain is fed back into either of the preparative steps.

EXTENSION ABSTRACT:

EXAMPLE - Lecithin powder (500 g) was mixed with solution and/or suspension of alginic acid (25 g) in citric acid (10 %, by weight) for 3 minutes in a high velocity mixer at 3000 U/minute. Silicon dioxide (2.5 g) was added to the above mixture and homogenously mixed for further 30 seconds. The obtained product was dried for 1 hour at 50 degreesC to give the non-sticky granulate with grain size of greater than 1 mm.

FILE SEGMENT: CPI
MANUAL CODE: CPI: A12-W09; B03-H; B04-B01C1; B04-B01C2; B04-C02A1; B04-C02A2; B04-C02B2; B04-C02D; B05-A01B; B05-A03A2; B05-B01P; B05-B02C; B10-A07C; B12-M11D; D03-G01 ; D03-H01T

L64 ANSWER 2 OF 5 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-781077 [200374] WPIX
TITLE: Antioxidant preparation, useful as topical or oral antiaging agent, comprises synergistic mixture of bilberry, red clover, vine and/or green tea extract and vitamin C and/or E
DERWENT CLASS: A96; A97; B05; D13; D21; E19
INVENTOR: ARIAS C; KRAECHTER H; MEHLING A
PATENT ASSIGNEE: (ARIA-I) ARIAS C; (KRAE-I) KRAECHTER H; (MEHL-I) MEHLING A; (COGI-C) COGNIS IBERIA SL
COUNTRY COUNT: 28

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1344516	A1	20030917	(200374)*	DE	31[0]		<--
WO 2003075861	A1	20030918	(200374)	DE			<--
US 20050158396	A1	20050721	(200548)	EN			<--
JP 2005535566	T	20051124	(200581)	JA	39		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1344516 A1		EP 2002-5583	20020312
JP 2005535566 T		JP 2003-574137	20030303
WO 2003075861 A1		WO 2003-EP2143	20030303
US 20050158396 A1		WO 2003-EP2143	20030303
JP 2005535566 T		WO 2003-EP2143	20030303
US 20050158396 A1		US 2005-505849	20050303

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 2005535566 T	Based on	WO 2003075861 A

PRIORITY APPLN. INFO: EP 2002-5583 20020312

INT. PATENT CLASSIF.:

MAIN:	A61K0007-00
SECONDARY:	A23K0001-16; A23L0001-30; A23L0001-302; A61K0031-05; A61K0031-353; A61K0031-355; A61K0031-375; A61K0035-78; A61K0047-32; A61K0047-36; A61K0047-38; A61K0047-42; A61K0009-16; A61P0039-06; C09K0015-06; C09K0015-34; C09K0003-00
IPC RECLASSIF.:	A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23L0001-30 [I,A]; A23L0001-30 [I,C]; A23L0001-302 [I,A]; A23L0001-302 [I,C] ; A23L0001-305 [I,A]; A23L0001-305 [I,C]; A61K0031-045 [I,C]; A61K0031-05 [I,A]; A61K0031-352 [I,C]; A61K0031-353 [I,A]; A61K0031-355 [I,A]; A61K0031-375 [I,A]; A61K0031-375 [I,C]; A61K0036-18 [I,A]; A61K0036-18 [I,C]; A61K0036-185 [I,C]; A61K0036-48 [I,A]; A61K0047-32 [I,A]; A61K0047-32 [I,C]; A61K0047-36 [I,A]; A61K0047-36 [I,C]; A61K0047-38 [I,A]; A61K0047-38 [I,C]; A61K0047-42 [I,A]; A61K0047-42 [I,C]; A61K0008-30 [I,A]; A61K0008-30 [I,C]; A61K0008-33 [I,A]; A61K0008-49 [I,A]; A61K0008-65 [I,A]; A61K0008-67 [I,A]; A61K0008-72 [I,C]; A61K0008-73 [I,A]; A61K0008-96 [I,A]; A61K0008-96 [I,C]; A61K0008-97 [I,A]; A61K0009-16 [I,A]; A61K0009-16 [I,C]; A61P0039-00 [I,C]; A61P0039-06 [I,A]; C09K0015-00 [I,C]; C09K0015-06 [I,A]; C09K0015-34 [I,A]; C09K0003-00 [I,A]; C09K0003-00 [I,C]
ICO:	K23V0002:00+FLAVO+VITE+VITC; K61K0201:062
USCLASS NCLM:	424/490.000
NCLS:	424/729.000; 424/732.000; 424/757.000; 424/766.000; 514/027.000; 514/456.000; 514/458.000; 514/474.000

JAP. PATENT CLASSIF.:

MAIN/SEC.:	A23K0001-16 302 B; A23K0001-16 304 C; A23K0001-16 305 B; A23L0001-30 B; A23L0001-302; A61K0031-05; A61K0031-353; A61K0031-355; A61K0031-375; A61K0035-78 C; A61K0035-78 J; A61K0047-32; A61K0047-36; A61K0047-38; A61K0047-42; A61K0007-00 C; A61K0007-00 H; A61K0007-00 K; A61K0008-30;

A61K0008-33; A61K0008-49; A61K0008-65; A61K0008-67;
A61K0008-73; A61K0008-97; A61K0009-16; A61P0039-06;
A61Q0019-08; C09K0015-06; C09K0015-34; C09K0003-00 103 L

FTERM CLASSIF.: 2B150; 4B018; 4C076; 4C083; 4C086; 4C088; 4C201; 4C206;
4H016; 4H025; 4C086/AA01; 4C206/AA01; 4C086/AA02;
4C206/AA02; 4C083/AA11.1; 4C083/AA11.2; 4C076/AA31;
4H025/AA82; 4H025/AA83; 4C083/AB21.2; 4C083/AB24.2;
4C083/AB43.2; 4C088/AB44; 4C088/AB45; 4C088/AB56;
4C088/AB59; 4H025/AC05; 4C083/AC12.2; 4C083/AC17.2;
4C083/AC18.2; 4C083/AC21.2; 4C083/AC30.2; 4C083/AC34.2;
4C083/AC35.2; 4C083/AC42.2; 4C083/AC44.2; 4C083/AC47.1;
4C083/AC47.2; 4C083/AC78.2; 4C083/AC84.1; 4C083/AC84.2;
4C083/AC85.2; 4C083/AD07.2; 4C083/AD09.1; 4C083/AD21.1;
4C083/AD27.1; 4C083/AD30.1; 4C083/AD30.2; 4C083/AD32.1;
4C083/AD32.2; 4C083/AD41.2; 4C083/AD44.1; 4C083/AD57.1;
4C083/AD64.1; 4C083/AD64.2; 4C083/AD66.1; 4C083/AD66.2;
4H025/BA01; 4H025/BA04; 4C088/BA08; 4C086/BA09;
4C088/BA11; 4C088/BA14; 4C086/BA18; 4C088/BA32;
4C076/BB01; 4C088/CA03; 4C088/CA11; 4C206/CA19;
4C083/CC01; 4C083/CC02; 4C083/CC05; 4C076/CC07;
4C083/CC19; 4C076/CC40; 4C083/DD23; 4C083/DD27;
2B150/DD31; 4C083/DD31; 4C083/DD32; 4C083/DD33;
2B150/DD57; 4C076/DD63.H; 2B150/DE13; 2B150/DE15;
4C076/EE10.H; 4C083/EE12; 4C076/EE30.H; 4C076/EE33.H;
4C076/EE36.H; 4C076/EE37.H; 4C076/EE42.H; 4C076/FF21;
4C076/GG21; 4B018/LE02; 4C088/MA02; 4C086/MA03;
4C206/MA03; 4C086/MA05; 4C206/MA05; 4C086/MA36;
4C088/MA36; 4C086/MA52; 4C088/MA52; 4C206/MA56;
4C206/MA72; 4B018/MD23; 4B018/MD25; 4B018/MD48;
4B018/MD52; 4B018/MD61; 4B018/ME06; 4B018/ME10;
4B018/MF01; 4C086/NA05; 4C088/NA05; 4C206/NA05;
4C086/ZC37; 4C088/ZC37; 4C206/ZC37

BASIC ABSTRACT:

EP 1344516 A1 UPAB: 20100122

NOVELTY - Antioxidant preparations (I) contain:

(1) (A) at least two extracts selected from Vaccinium myrtillus (bilberry), Trifolium pratense (red clover), Vitis vinifera (vine) and Thea vinensis (green tea) extracts (preferably anthocyanosides, isoflavone glucosides and polyphenols); and

(2) (B) vitamin E and/or vitamin C (i.e. tocopherol and/or ascorbic acid).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) production of microcapsules of average diameter 0.1-5 mm, consisting of a capsule membrane and a matrix containing active agents comprising:

(a) forming a matrix from (A), (B), gel former and chitosan or anionic polymer;

(b) optionally dispersing the matrix in an oil phase; and

(c) contacting the dispersed matrix with an aqueous solution of anionic polymer (if chitosan was used in step (a)) or chitosan (if anionic polymer was used in step (a)) and optionally removing the oil phase;

(2) the microcapsules as above;

(3) pro-liposomal active agent mixtures, obtained by treating (A) and (B) in cosmetically acceptable solutions with lecithins and/or phospholipids; and

(4) the production of pro-liposomal active agent mixtures as in (3).

ACTIVITY - Dermatological.

No biological data is given.

MECHANISM OF ACTION - Antioxidant; Synergist.

USE - (I) (optionally in encapsulated form) are used as antioxidants, specifically for use as antiaging agents, in cosmetic and/or pharmaceutical preparations, as nutritional supplements or as animal feed additives (all claimed). In particular (I), on oral or topical administration, vitalizes and regenerates the skin, smoothes wrinkles, protects the skin against environmental factors or dryness and shows general antiaging action.

ADVANTAGE - (I) has synergistic antioxidant and phytohormone action, and is useful as a multifunction active agent of vegetable origin (i.e. with no risk of BSE transmission). In the form of the microcapsules, (I) is stable towards surfactants, can be incorporated stably in cosmetic preparation and is well tolerated by the mucosa (i.e. completely non-toxic).

TECHNOLOGY FOCUS:

POLYMERS - Preferred Materials: The gel formers are heteropolysaccharides (preferably agarose, agar, pectin and/or xanthan) or proteins (preferably gelatin). The chitosan has an average molecular weight of 10000-50000 or 80000-1200000. The anionic polymers are selected from alginate salts, anionic chitosan derivatives, poly(meth)acrylates and carboxymethyl cellulose.

EXTENSION ABSTRACT:

ADMINISTRATION - The weight ratio of (A) to (B) is 1-9 : 9-1 (based on solids). (I) is administered topically or orally (optionally in encapsulated form) (all claimed). Suitable topical formulations are creams, gels, lotions, solutions, emulsions, wax/fat masses, sticks, powders or ointments, containing (I) at 0.1-50 (preferably 5-15) weight %.

EXAMPLE - Agar (3 g) was dissolved in 200 ml boiling water, followed by treatment under vigorous stirring with a homogeneous dispersion of 10 g glycerol and 2 g talc in water (to 100 g). A mixture of 25 g Hydagen DCMF (RTM; 1 weight % chitosan in glycolic acid), 3 g 10 weight % aqueous extract of Vaccinium myrtillus, 2 g 10 weight % aqueous extract of Trifolium pratense, 3 g 10 weight % aqueous extract of Vitis vinifera and 1 g 10 weight % aqueous extract of Thea vinensis, 0.5 g tocopherol, 0.5 g ascorbic acid, 0.5 g Phenonip (RTM; preservative mixture of phenoxyethanol and parabens) and water (to 100 g) was added. The obtained matrix was filtered, heated to 60 degrees C and added dropwise to 0.5 weight % sodium alginate solution. The mixture was filtered to recover microcapsules having a constant diameter. The microcapsules were incorporated in a cosmetic soft cream preparation at 1.0 weight %, the other components being 5.0 weight % Emulgade SE (RTM; glyceryl stearate, ceteareth 12/20, cetearyl alcohol and cetyl palmitate), 3.0 weight % Cetiol SN (RTM; cetearyl isononanoate), 3.0 weight % Cetiol V (RTM; decyl oleate), 2.0 weight % Nutrilan Elastin E20 (RTM; elastin hydrolyzate), 1.0 weight % Hydagen CMF (RTM; chitosan), 3.0 weight % glycerol (86%) and water (plus preservatives) to 100 weight %.

FILE SEGMENT: CPI

MANUAL CODE: CPI: A10-E09; A11-B05; A12-V01; A12-V04C; A12-W05; B03-F; B03-H; B04-A08C; B04-A10; B06-A01; B10-E02; B14-N17; B14-R01; B14-S08; B14-S09; D03-G01; D03-H01T2; D08-B09A3; E06-A01; E07-A02B; E07-A02H

L64 ANSWER 3 OF 5 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN

ACCESSION NUMBER: 2000-376291 [200032] WPIX

DOC. NO. CPI: C2000-113726 [200032]

TITLE: Stable powder containing tocotrienol prepared by emulsifying tocotrienol containing oil, adding powder and spray-drying

DERWENT CLASS: A96; A97; B05; D13

INVENTOR: HORITA Y; HOSOKAWA T; IKUSHIMA H; SHISHIDO T; TANAKA N; YOKOI S

PATENT ASSIGNEE: (FUJC-C) FUJI CHEM IND CO LTD
COUNTRY COUNT: 28

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2000027393	A1	20000518	(200032)*	JA	33[1]		<--
EP 1044687	A1	20001018	(200053)	EN			<--
KR 2001033917	A	20010425	(200164)	KO			<--
JP 3258003	B2	20020218	(200219)	JA	12		<--
JP 2000580622	X	20020212	(200227)	JA			<--
US 6562372	B1	20030513	(200335)	EN			<--
EP 1044687	B1	20080903	(200859)	EN			
DE 69939457	E	20081016	(200868)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000027393	A1	WO 1999-JP6180	19991105
EP 1044687	A1	EP 1999-954410	19991105
EP 1044687	B1	EP 1999-954410	19991105
EP 1044687	A1 PCT Application	WO 1999-JP6180	19991105
JP 3258003	B2 PCT Application	WO 1999-JP6180	19991105
JP 2000580622	X PCT Application	WO 1999-JP6180	19991105
US 6562372	B1 PCT Application	WO 1999-JP6180	19991105
EP 1044687	B1 PCT Application	WO 1999-JP6180	19991105
JP 3258003	B2	JP 2000-580622	19991105
JP 2000580622	X	JP 2000-580622	19991105
US 6562372	B1	US 2000-509996	20000405
KR 2001033917	A	KR 2000-707496	20000706
DE 69939457	E	DE 1999-69939457	19991105
DE 69939457	E	EP 1999-954410	19991105
DE 69939457	E PCT Application	WO 1999-JP6180	19991105

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1044687	A1 Based on	WO 2000027393 A
JP 3258003	B2 Based on	WO 2000027393 A
JP 2000580622	X Based on	WO 2000027393 A
US 6562372	B1 Based on	WO 2000027393 A
EP 1044687	B1 Based on	WO 2000027393 A
DE 69939457	E Based on	EP 1044687 A
DE 69939457	E Based on	WO 2000027393 A

PRIORITY APPLN. INFO: JP 1999-125843 19990506
JP 1998-332054 19981106

INT. PATENT CLASSIF.:

MAIN:	A61K0031-35; A61K0031-353
SECONDARY:	A61K0007-00
INDEX:	C08L0001:00; C08L0003:00; C08L0005:00; C08L0089:00
IPC ORIGINAL:	A23K0001-16 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-16 [I,C]; A23L0001-30 [I,A]; A23L0001-30 [I,A]; A23L0001-30 [I,C]; A23L0001-30 [I,C]; A61K0031-35 [I,A]; A61K0031-35 [I,A]; A61K0031-35 [I,C]; A61K0031-35 [I,C]; A61K0047-02 [I,C]; A61K0047-02 [I,C]; A61K0047-04 [I,A]; A61K0047-04 [I,A];

A61K0047-24 [I,A]; A61K0047-24 [I,A]; A61K0047-24 [I,C];
A61K0047-24 [I,C]; A61K0047-38 [I,A]; A61K0047-38 [I,A];
A61K0047-38 [I,C]; A61K0047-38 [I,C]; A61K0009-14 [I,A];
A61K0009-14 [I,A]; A61K0009-14 [I,C]; A61K0009-14 [I,C];
A61K0009-16 [I,A]; A61K0009-16 [I,A]; A61K0009-16 [I,C];
A61K0009-16 [I,C]; A61K0009-16 [I,C]; A61K0009-20 [I,A];
A61K0009-20 [I,A]; A61K0009-20 [I,C]; A61K0009-20 [I,C];
C08J0003-12 [I,A]; C08J0003-12 [I,A]; C08J0003-12 [I,C];
C08J0003-12 [I,C]; C08K0003-00 [I,C]; C08K0003-00 [I,C];
C08K0003-32 [I,A]; C08K0003-32 [I,A]; C08K0003-34 [I,A];
C08K0003-34 [I,A]; C08L0001-00 [I,A]; C08L0001-00 [I,C];
C08L0003-00 [I,A]; C08L0003-00 [I,C]; C08L0005-00 [I,A];
C08L0005-00 [I,C]; C08L0089-00 [I,A]; C08L0089-00 [I,C];
C08L0091-00 [I,A]; C08L0091-00 [I,C]

IPC RECLASSIF.: A23K0001-16 [I,A]; A23K0001-16 [I,C];
A61K0031-35 [I,A]; A61K0031-35 [I,C]; A61K0047-02 [I,C];
A61K0047-04 [I,A]; A61K0009-16 [I,A]; A61K0009-16 [I,C];
A61K0009-20 [I,A]; A61K0009-20 [I,C]

ECLA: A23K0001-16B; A61K0009-16H2; A61K0009-16H4;
A61K0009-16H6F; A61K0009-16H6H; A61K0031-35

ICO: K61K0009:20H2; K61K0009:20H4; K61K0009:20H6F2;
K61K0009:20H6F4; K61K0009:20H6H

JAP. PATENT CLASSIF.:

MAIN/SEC.: A23K0001-16 302 B; A23L0001-30 B; A61K0031-353;
A61K0047-04; A61K0047-24; A61K0047-38; A61K0007-00 C;
A61K0009-14; A61K0009-20; C08J0003-12; C08K0003-32;
C08K0003-34; C08L0091-00

FTERM CLASSIF.: 2B150; 4B018; 4C076; 4C083; 4C086; 4F070; 4J002;
4C086/AA01; 4F070/AA02; 4F070/AA03; 4C086/AA04;
4F070/AA05; 4C076/AA36; 4F070/AA62; 4F070/AA63;
4J002/AB03.1; 4J002/AB04.4; 4J002/AB05.4; 4J002/AB05.5;
2B150/AB20; 4C083/AB37.2; 4J002/AD01.4; 4J002/AD02.4;
4J002/AD03.2; 4C083/AD26.2; 4C083/AD41.2; 4C083/AD47.2;
4C083/AD57.2; 4C083/AD66.1; 4C083/AD66.2; 2B150/AE01;
4F070/AE01; 2B150/AE02; 4J002/AE03.3; 4F070/AE09;
4F070/AE14; 4F070/AE22; 2B150/AE33; 2B150/AE40;
2B150/AE43; 2B150/AE48; 4C086/BA09; 4C076/BB01;
2B150/BB03; 2B150/BD06; 4C083/CC01; 2B150/CC14;
4F070/DA34; 2B150/DB01; 2B150/DC09; 4F070/DC16;
4C076/DD27; 4C076/DD41.C; 4C076/DD59; 4J002/DE18.6;
4J002/DH03.6; 2B150/DH04; 2B150/DH05; 2B150/DH14;
2B150/DH15; 4J002/DJ00.6; 4C076/EE31; 4C076/EE36;
4C076/EE38; 4C076/EE42; 4C076/EE51; 4J002/EF05.7;
4J002/FD01.6; 4J002/FD17.7; 4C083/FF01; 4C076/FF29;
4C076/FF36; 4J002/GB04; 4C076/GG14; 4B018/LE01;
4C086/MA35; 4C086/MA52; 4B018/MD08; 4B018/MD20;
4B018/MD35; 4B018/MD37; 4B018/MD46; 4B018/ME06;
4B018/ME13; 4B018/MF06; 4B018/MF08; 4C086/NA03;
4C086/ZA36; 4C086/ZA81; 4C086/ZB26; 4C086/ZC35

BASIC ABSTRACT:

WO 2000027393 A1 UPAB: 20050411

NOVELTY - Tocotrienol containing powder produced by the following process is claimed:

(i) treating a tocotrienol containing oil with lecithin, cellulose, and an emulsifier in water to give an emulsion;

(ii) mixing with a powder to give a suspension; and

(iii) spray drying the suspension.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for tablets prepared by compression molding the above powder.

ACTIVITY - Cytostatic; antilipemic; thrombolytic; immunomodulatory; antiinflammatory; tranquilizer; anabolic.

USE - Tocotrienol is a known antioxidant, and for use in the treatment of tumors, hypercholesterolemia, hyperlipidemia, thrombosis, immune system disorders, inflammation and anxiety. The powder can be used in pharmaceuticals, food, drinks and cosmetics.

ADVANTAGE - The powder is stable and has good flowability. TECHNOLOGY FOCUS:

ORGANIC CHEMISTRY - Preferred Powder: The powder comprises (by weight%) 0.1-3.0 (preferably 0.4-3.0)% lecithin (preferably plant lecithin, 'fumbetsu' lecithin, egg yolk lecithin or enzyme derived or produced lecithin); 0.1-10 (preferably 1-10)% cellulose (preferably carmellose sodium, methylcellulose hydroxypropylcellulose and/or hydroxypropylmethylcellulose), 0.1-30 (preferably 10-30)% emulsifier (preferably sodium caseinate, gum arabic and/or sodium alginate), 0.1-75 (preferably 30-75)% tocotrienol containing oil and 0.1-99 (preferably 10-50)% powder (preferably calcium silicate, anhydrous silicic acid, magnesium aluminum metasilicate, calcium hydrogenphosphate and/or dextran).

EXTENSION ABSTRACT:

EXAMPLE - Soyabean lecithin (1.0 g), sodium carmellose (2.0 g), gelatin (13.75 g) and water (400 ml) were homogenized and tocotrienol oil (55 g; containing 30 weight% tocotrienol) was added. The mixture was emulsified and calcium silicate (28.25 g) was added. The suspension was spray dried (inlet temperature 220degreesC, exit temperature 108degreesC) to give tocotrienol containing powder containing 16.5% tocotrienol.

FILE SEGMENT: CPI
MANUAL CODE: CPI: A03-A04A1; A03-A05; A12-V01; A12-V04; A12-W09; B04-B01B; B04-C02A; B05-B01P; B06-A01; B12-M11B; B12-M11G; B14-C03; B14-D02A2; B14-E11; B14-F04; B14-F06; B14-G03; B14-H01B; B14-J01B4; B14-S08; D03-H; D08-B

L64 ANSWER 4 OF 5 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1990-256409 [199034] WPIX
DOC. NO. CPI: C1990-110949 [199321]
TITLE: Oil in water type emulsion feed - used in agents for stimulation of oestrus behaviour and sexual potency
DERWENT CLASS: B05; C03; D13
INVENTOR: SHIBATA K
PATENT ASSIGNEE: (NISS-C) NISSHIN FLOUR MILLING CO
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 02178221	A	19900711	(199034)*	JA			<--
JP 2660031	B2	19971008	(199745)	JA	8[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 02178221 A		JP 1988-329179	19881228
JP 2660031 B2		JP 1988-329179	19881228

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 2660031 B2	Previous Publ	JP 02178221 A

PRIORITY APPLN. INFO: JP 1988-329179 19881228
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A23K0001-00 [I,A]; A61K0009-107 [I,A]; A61P0015-00 [I,A]; A61P0003-00 [I,A]
JAP. PATENT CLASSIF.:
MAIN/SEC.: A61K0009-107 X (ADD); A61K0009-107 X (AEX); A23K0001-00 Z; A61P0015-00 171; A61P0003-00
FTERM CLASSIF.: 2B150; 4C076; 4C201; 4C206; 4C076/AA16; 2B150/AB02; 2B150/AB04; 2B150/AB20; 2B150/AE13; 2B150/AE25; 4C076/BB34; 4C076/CC21; 4C076/CC29; 2B150/CJ08; 2B150/DA32; 4C076/DD21; 4C076/DD25; 4C076/DD26; 4C076/DD46.F; 4C076/DD63.F; 4C076/DD67; 2B150/DJ13; 4C076/EE07.F; 4C076/EE36.F; 4C076/EE38; 4C076/EE42.F; 4C076/EE53.A; 4C076/EE54.A; 4C076/EE57; 4C076/EE58.F; 4C076/FF16

BASIC ABSTRACT:

JP 02178221 A UPAB: 20050501

Oil in water (O/W) type emulsified feed containing 20-85% of fats, 0.01-5% of organic acid, 0.1-70% of emulsifier and 5-65% of water. Agent stimulating estrus behaviour and sexual potency containing the O/W type emulsion is also claimed.

The compsn. can be prepared from animal and vegetable oils, e.g. cotton or rape seed, corn, soybean, peanuts, olive and palm oils, lard, beef fat, cod liver oil and fish oil, organic acids, e.g. acetic, citric, lactic, malic, succinic tartaric and fumaric acids. The emulsifying agents include fatty acid esters of glycerin, sucrose, sorbitan and propyleneglycol, egg yolk, lecithin, gum arabic, gelatin and alginic acid. The compsn. can be prepared by conventional mixing method to give particles of a few micron dias. Other additives e.g. salt, sugars, starch, medicines, vitamins, minerals, nutrients, and antioxidants may be added singly or in combination. The obtd. compsn. can be used for domestic animals, poultry, fish and pets.

USE/ADVANTAGE - Increase of feed consumption with enhanced body weight gain in animals and fish. In female animals or fish, estrous cycle can be shortened and in male animals or fish, secretion of seminal fluid or number of sperms can be increased, thus fertility and natality rates can be improved. @(11pp Dwg.No.0/0)

FILE SEGMENT: CPI
MANUAL CODE: CPI: B04-B01B; B04-B01C1; B04-B01C2; B04-B04A6; B04-C02D; B05-B01P; B07-A02; B10-C02; B10-C04D; B10-C04E; B10-E04C; B10-G02; B12-L09; C04-B01B; C04-B01C1; C04-B01C2; C04-B04A6; C04-C02D; C05-B01P; C07-A02; C10-C02; C10-C04D; C10-C04E; C10-E04C; C10-G02; C12-L09; D03-G01

L64 ANSWER 5 OF 5 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1986-084759 [198613] WPIX
DOC. NO. CPI: C1986-036018 [199321]
DOC. NO. NON-CPI: N1986-061832 [199321]
TITLE: Drug delivery to cultivated fishes - by coating fish food with insoluble edible film carrying the drug
DERWENT CLASS: B05; C03; D13; P14
INVENTOR: KUMABE K
PATENT ASSIGNEE: (KUMA-I) KUMABE K
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 61031045	A	19860213	(198613)*	JA	5[0]	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 61031045 A		JP 1984-152112	19840724

PRIORITY APPLN. INFO: JP 1984-152112 19840724
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A01K0061-00 [I,A]; A23K0001-10 [I,A]; A23K0001-16 [I,A]; A23K0001-18 [I,A]
JAP. PATENT CLASSIF.:
MAIN/SEC.: A01K0061-00; A01K0061-00 B; A23K0001-10 101; A23K0001-16 305 Z; A23K0001-18 102
FTERM CLASSIF.: 2B003; 2B005; 2B104; 2B150; 2B003/AA00; 2B104/AA01; 2B104/AA05; 2B104/AA06; 2B150/AA08; 2B104/BA09; 2B104/BA14; 2B150/CD19; 2B104/CF02; 2B104/CF05; 2B150/CJ07; 2B150/CJ08; 2B150/DA57; 2B150/DC09; 2B150/DE01; 2B150/DE04; 2B150/DE05; 2B150/DE13; 2B150/DE15; 2B150/DF05; 2B150/DG09; 2B150/DG40; 2B150/DJ01; 2B150/DJ08; 2B150/DJ09; 2B150/DJ13; 2B150/DJ14; 2B005/GA01; 2B005/JA01; 2B005/KA02; 2B005/LA01; 2B005/LA03; 2B005/MA03; 2B005/MB01; 2B005/MB04; 2B005/MB09

BASIC ABSTRACT:

JP 61031045 A UPAB: 20050629

Administration of drugs to cultivated fishes comprises coating, as bait, raw fish or a piece of fish with a water-insoluble, edible film containing the drug.

Pref. drugs are various vitamins, antibiotics, hormones, auxotroph (e.g., choline), etc. The film can be formed by reaction of a polycation with a polyanion. Pref. polycations are chitosan, polylysine, lecithin, etc. Pref. polyanions are carragheenin, alginic acid, alginates, pectin, gum, etc.

When raw fish is coated directly with a drug (e.g., vitamin B, C or E) and covered with a protecting film, the activity of the drug decreases due to the action of enzymes present in the tissue of the fish. To prevent such inactivation of the drug the drug is pref. coated with oil-and-fat, protein or phospholipid before applying to the surface of raw fish.

ADVANTAGE - Since the drug is protected by a water-insoluble film, loss of the drug into the water can be prevented. Since the drug is administered together with bait, high drug administration efficiency is obtd. - In an example, a mixture of hardened rapeseed oil (4g) and lecithin (1g) is melted, and thiamine (1,000 mg) is added to the melt. After cooling, the solidified prod. is pulverised to give a vitamin-containing powder. A solution (500 ml) containing sodium alginate (5g) and sucrose sorbitan ester (2.5g), is added to the vitamin-containing powder. The resulting solution is sprayed onto raw fish (10 kq). The treated fish is then dipped in an aqueous solution containing 0.5% chitosan, so that a water-insoluble film is formed on the raw fish by reaction of sodium alginate with chitosan.

FILE SEGMENT: CPI; GMPI
MANUAL CODE: CPI: B02-Z; B03-L; B04-B02D; B04-C02; B10-A22; B12-L09; C02-Z; C03-L; C04-B02D; C04-C02; C10-A22; C12-L09; D03-G05; D03-H01S; D03-H15

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=> D L61 1-10 IFULL

L61  ANSWER 1 OF 10  WPIX COPYRIGHT 2012       THOMSON REUTERS on STN
ACCESSION NUMBER:     2004-637101 [200462]   WPIX
DOC. NO. CPI:         C2004-229125 [200462]
TITLE:                Use of cysteamine or composition comprising cysteamine
                      for improving immunity of animals e.g. vertebrate animals
DERWENT CLASS:        A96; B05; C03; D13
INVENTOR:             CHI F; SHEN Z; WEN Q T; WEN Q
PATENT ASSIGNEE:      (CHIF-I) CHI F; (OMEG-N) OMEGA BIO PHARMA; (OMEG-N) OMEGA
                      BIO-PHARMA IP2 LTD; (WENQ-I) WEN Q T; (WALC-N) WALCOM
                      ANIMAL SCI IP6 LTD
COUNTRY COUNT:        108

PATENT INFORMATION:

      PATENT NO      KIND DATE     WEEK     LA  PG          MAIN IPC
      ---------------------------------------------------------------
      GB 2398497      A  20040825 (200462)* EN  45[0]                    <--
      WO 2004073700   A1 20040902 (200462)  EN                           <--
      EP 1594487      A1 20051116 (200575)  EN                           <--
      US 20060140906  A1 20060629 (200644)  EN
      CN 1750816      A  20060322 (200649)  ZH
      JP 2006517942   T  20060803 (200651)  JA  19
      KR 2005102130   A  20051025 (200652)  KO                           <--
      TW 2005005415   A  20050216 (200958)  ZH                           <--

APPLICATION DETAILS:

      PATENT NO      KIND                 APPLICATION    DATE
      ---------------------------------------------------------------
      GB 2398497 A                        GB 2003-3843 20030219
      CN 1750816 A                        CN 2004-80004630 20040217
      EP 1594487 A1                       EP 2004-711590 20040217
      WO 2004073700 A1                    WO 2004-EP1476 20040217
      EP 1594487 A1                       WO 2004-EP1476 20040217
      US 20060140906 A1                   WO 2004-EP1476 20040217
      JP 2006517942 T                     WO 2004-EP1476 20040217
      KR 2005102130 A                     WO 2004-EP1476 20040217
      KR 2005102130 A                     KR 2005-715349 20050819
      US 20060140906 A1                   US 2005-546127 20050819
      JP 2006517942 T                     JP 2006-501865 20040217
      TW 2005005415 A                     TW 2004-103960 20040218

FILING DETAILS:

      PATENT NO       KIND                 PATENT NO
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      EP 1594487 A1          Based on      WO 2004073700 A
      JP 2006517942 T        Based on      WO 2004073700 A
      KR 2005102130 A        Based on      WO 2004073700 A

PRIORITY APPLN. INFO: GB 2003-3843         20030219
INT. PATENT CLASSIF.:
        MAIN:       A61K0031-13; A61K0031-131
      SECONDARY:    A61K0037-04
   IPC ORIGINAL:    A23K0001-16 [I,A]; A61K0031-13 [I,A]; A61K0031-13 [I,C];
                    A61K0031-131 [I,A]; A61K0031-145 [I,A]; A61K0031-716
                    [I,C]; A61K0031-724 [I,A]; A61K0038-20 [I,A]; A61K0038-20
                     [I,C]; A61K0047-20 [I,A]; A61K0047-26 [I,A]; A61K0047-32
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[I,A]; A61K0047-34 [I,A]; A61K0047-36 [I,A]; A61K0047-38 [I,A]; A61K0047-40 [I,A]; A61K0047-42 [I,A]; A61K0047-48 [I,A]; A61K0009-16 [I,A]; A61P0031-00 [I,A]; A61P0037-04 [I,A]

IPC RECLASSIF.: A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-18 [I,A]; A23K0001-18 [I,C]; A61K0031-131 [I,A]; A61K0031-131 [I,C]; A61P0037-00 [I,C]; A61P0037-04 [I,A]

ECLA: A23K0001-16D; A23K0001-18K; A61K0031-131

USCLASS NCLM: 424/085.200

NCLS: 514/058.000; 514/665.000

JAP. PATENT CLASSIF.:

MAIN/SEC.: A23K0001-16 301 D; A23K0001-16 305; A61K0031-145; A61K0047-20; A61K0047-26; A61K0047-32; A61K0047-34; A61K0047-36; A61K0047-38; A61K0047-40; A61K0047-42; A61K0009-16; A61P0031-00 171; A61P0037-04

FTERM CLASSIF.: 2B150; 4C076; 4C201; 4C206; 4C206/AA01; 4C076/AA31; 2B150/AE16; 2B150/AE36; 4C076/BB01; 4C076/BB36; 2B150/BC01; 4C076/CC07; 2B150/DA13; 2B150/DA20; 2B150/DA43; 4C076/DD24.A; 2B150/DH04; 2B150/DJ10; 4C076/EE06.A; 4C076/EE09.A; 4C076/EE31.A; 4C076/EE33.A; 4C076/EE38.A; 4C076/EE39.A; 4C076/EE42.A; 4C076/FF03; 4C206/JA52; 4C206/MA03; 4C206/MA05; 4C206/MA61; 4C206/MA72; 4C206/NA11; 4C206/ZB09; 4C206/ZB32; 4C206/ZC61

BASIC ABSTRACT:

GB 2398497 A UPAB: 20060203

NOVELTY - To improve the immunity of animals, cysteamine or its salts or a composition comprising the cysteamine is used.

ACTIVITY - Anti-HIV.

MECHANISM OF ACTION - Immunostimulant.

USE - Used for improving immunity (e.g. increasing the level of interleukin-2 and interleukin-6, and stimulating the production of lymphocytes) of animals e.g. vertebrate animals and for manufacturing animal feed and its additives (Claimed), and in combination with conventional AIDS pharmaceutical for treating HIV infected patients.

ADVANTAGE - The composition is reliable and has no gastric side effects. The composition exhibits a small granular shape having a smooth surface, good flow property, is easy to blend with animal feeds and has good stability. When the composition is packaged with sealed plastic bags and stored for one year in a cool, dark and dry place, the properties remain unchanged, so that the composition can be used as a feed additive. The activity of the composition is preserved during storage and until it reaches the intestine of the animals. The composition can be easily administered to farm animals on a large scale basis cost effectively because it can be readily mixed with any basal feed. No separate procedure or injection is needed. Due to the improved immunity, farms for raising meat producing cattle have a higher yield due to a lower death rate.

TECHNOLOGY FOCUS:

PHARMACEUTICALS - Preferred Composition: The composition comprises (in weight%): cysteamine or its salts (1-95) and an inclusion compound host material composition (1-60) containing a stabilizer.

ORGANIC CHEMISTRY - Preferred Composition: The composition comprises (in weight%): at least one filler (1-90), disintegrant (5-50) and binder (5-50), flavoring (0.05-0.3) and smelling agent (0.05-0.3) for enhancing the flavor, and enteric coating material (1-20).

The cysteamine containing composition is formed into granules, each of which comprises at least one layer of the coating materials. When formed into granules, the cysteamine or its salts are shielded from its surroundings by the inclusion host material composition. The granules of the cysteamine containing composition have a size of 0.28-0.90 mm in diameter. The cysteamine containing composition

is encapsulated by the enteric coating materials.

Preferred Components: The stabilizer is cyclodextrin or its derivatives.

Preferred Components: The coating material comprises cellulose acetate phthalate, starch acetate phthalate, glucose or fructose derivative from phthalic acid, acrylic acid and methacrylic copolymer, polymethyl vinyl ether, partly esterified substance of maleic anhydride copolymer and formogelatine. The filler is powdered cellulose or starch. The binder is hydroxypropyl starch, microbial alginate, microcrystalline cellulose or starch.

INORGANIC CHEMISTRY - Preferred Components: The filler is calcium sulfate.

EXTENSION ABSTRACT:

EXAMPLE - A cysteamine containing composition comprised (in weight%) cysteamine (30) together with other ingredients including cyclodextrin (stabilizer) (10). - An experiment was carried out to determine the effect of the composition on the immunity of one hundred Holstein cows. The cows were divided into a test group and a control group. The test group was administered with a predetermined amount of the composition via their cornmeal diet, while the control group was left untreated. The cows were fed three times daily at a time interval of 7 hours each. Blood samples were collected from the cows at the end of the fifth week treatment period. Blood samples (2 ml) were centrifuged at 1500 revolutions per minute (rpm) for 15 minutes. The supernatants were pooled and stored at -20degreesC for interleukin-2 (IL-2) and IL-6 analysis. - Results showed that the test group of cows had 29% higher serum concentration of interleukin-2 (IL-2) than that of the control group of cows. The test group of cows had a 22.8% higher plasma concentration of interleukin-6 (IL-6). It was found that cysteamine modulated and strengthened the immune system of animals by increasing the levels of IL-2 and IL-6.

FILE SEGMENT: CPI

MANUAL CODE: CPI: A12-V; A12-V01; A12-W09; B04-C02A; B04-C02B; B05-A01B; B10-B03B; B14-A02B1; B14-G01B; C04-C02A; C04-C02B; C05-A01B; C10-B03B; C14-A02B1; C14-G01B; D03-G01; D03-H01T2

L61 ANSWER 2 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN

ACCESSION NUMBER: 2004-468022 [200444] WPIX

CROSS REFERENCE: 2008-H54844

DOC. NO. CPI: C2004-175247 [200444]

DOC. NO. NON-CPI: N2004-369850 [200444]

TITLE: Dust-free animal feedstuffs additive based on fermentation broth having improved abrasion resistance, contains L-lysine, and oil

DERWENT CLASS: A11; A17; A25; A26; A97; D13; P14

INVENTOR: CALDWELL P; DUBNER F; DUEBNER F; KAEPPKE F; KALIVODA L; KALIVODA L F; KAPPKE F; KELLE R; KELLER R; LOTTER H; POHLISCH J; WECKBECKER C; BNER F D

PATENT ASSIGNEE: (DEGS-C) DEGUSSA AG; (CALD-I) CALDWELL P; (DUBN-I) DUBNER F; (KALI-I) KALIVODA L F; (KAPP-I) KAPPKE F; (KELL-I) KELLE R; (LOTT-I) LOTTER H; (MIDW-N) MIDWEST LYSINE; (POHL-I) POHLISCH J; (WECK-I) WECKBECKER C; (EVON-C) EVONIK DEGUSSA GMBH

COUNTRY COUNT: 106

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

US 20040115304	A1	20040617	(200444)*	EN	9[2] <--
WO 2004054381	A1	20040701	(200444)	EN	<--
AU 2003292097	A1	20040709	(200474)	EN	<--
EP 1571918	A1	20050914	(200560)	EN	<--
AU 2003292097	A8	20040709	(200565)	EN	<--
BR 2003017341	A	20051108	(200577)	PT	<--
MX 2005006332	A1	20050901	(200617)	ES	<--
CN 1725958	A	20060125	(200639)	ZH	
KR 2005085618	A	20050829	(200644)	KO	<--
CN 100527981	C	20090819	(200969)	ZH	
MX 278886	B	20100909	(201133)	ES	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040115304	A1	US 2002-319843	20021216
AU 2003292097	A1	AU 2003-292097	20031125
AU 2003292097	A8	AU 2003-292097	20031125
BR 2003017341	A	BR 2003-17341	20031125
CN 1725958	A	CN 2003-80106308	20031125
CN 100527981	C	CN 2003-80106308	20031125
EP 1571918	A1	EP 2003-767636	20031125
WO 2004054381	A1	WO 2003-EP13200	20031125
EP 1571918	A1	WO 2003-EP13200	20031125
BR 2003017341	A	WO 2003-EP13200	20031125
MX 2005006332	A1	WO 2003-EP13200	20031125
KR 2005085618	A	WO 2003-EP13200	20031125
KR 2005085618	A	KR 2005-710778	20050613
MX 2005006332	A1	MX 2005-6332	20050613
MX 278886	B PCT Application	WO 2003-EP13200	20031125
MX 278886	B	MX 2005-6332	20050613

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003292097	A1 Based on	WO 2004054381 A
EP 1571918	A1 Based on	WO 2004054381 A
AU 2003292097	A8 Based on	WO 2004054381 A
BR 2003017341	A Based on	WO 2004054381 A
MX 2005006332	A1 Based on	WO 2004054381 A
KR 2005085618	A Based on	WO 2004054381 A
MX 278886	B Based on	WO 2004054381 A

PRIORITY APPLN. INFO: US 2002-319843 20021216
INT. PATENT CLASSIF.:
MAIN: A23K0001-16
IPC ORIGINAL: A23K0001-00 [I,A]; A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-00 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,C]
IPC RECLASSIF.: A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-16 [I,C]
ECLA: A23K0001-00B1; A23K0001-00B3; A23K0001-16G1
USCLASS NCLM: 426/002.000
BASIC ABSTRACT:

US 20040115304 A1 UPAB: 20060203
NOVELTY - A dust-free animal feedstuffs additive based on fermentation broth having improved abrasion resistance, contains L-lysine at 30-90 weight% referred to the total amount, where at least97%, preferably at least98% has a mean particle size of greater than 0.1-1.8 mm. The additive contains, on the

surface a proportion of added additive, in particular oil, at 0.02-2 weight% referred to the total amount of the feedstuffs additive.

DETAILED DESCRIPTION - A dust-free animal feedstuffs additive based on fermentation broth having improved abrasion resistance, containing L-lysine and preferably the majority of the further constituent of the fermentation broth, the biomass produced during the fermentation being at least0-100%, contains L-lysine at 30-90 weight% referred to the total amount, where at least97%, preferably at least98% has a mean particle size of greater than 0.1-1.8 mm. The additive contains, on the surface a proportion of added additive, in particular oil, at 0.02-2 weight% referred to the total amount of the feedstuffs additive. An INDEPENDENT CLAIM is also included for a process for the production of a dust-free feedstuffs additive, comprising spraying a shape, granulated animal feedstuffs additive with an additive that is metered at 0.02-2 weight% referred to the amount of animal feedstuffs additive used.

USE - As additive for animal feedstuffs.

ADVANTAGE - The additive has improved abrasion resistance. TECHNOLOGY FOCUS:

FOOD - Preferred Components: The animal feedstuffs additive contains on the surface, as additive, oil(s) consisting of mineral oil, vegetable oils, soybean oil, olive oil, soya/lecitnin mixtures, edible oils, or mixtures of vegetable oils. It contains byproducts from the sugar and starch industry, in particular CSL (sic) or oily compounds. Preferred Composition: The animal feedstuffs additive contains 0.2-1 weight% of added additive.

POLYMERS - Preferred Components: The animal feedstuffs additive contains on the surface, additives comprising silicone oils, polyethylene glycols, or hydroxyethylcellulose.

FILE SEGMENT: CPI; GMPI
MANUAL CODE: CPI: A12-V; A12-W09; D03-G01

L61 ANSWER 3 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-240860 [200423] WPIX
DOC. NO. CPI: C2004-094197 [200423]
TITLE: Animal-feed additive in liquid or solid form comprises fermentation liquor containing one or more cysteine compounds from L-cysteine, L-cystine, thiazolidines, and/or their salts, and non-cellular ingredients of fermentation liquor
DERWENT CLASS: A96; B05; C03; D13; D16; E19; P14
INVENTOR: BINDER M; BUCHHOLZ M; HERMANN T; PFEFFERLE W; THIERBACH G
PATENT ASSIGNEE: (DEGS-C) DEGUSSA AG; (EVON-C) EVONIK DEGUSSA GMBH
COUNTRY COUNT: 32

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1389427	A1	20040218	(200423)*	EN	22[1]		<--
DE 10237479	A1	20040226	(200423)	DE			<--
US 20050271768	A1	20051208	(200581)	EN			<--
US 7348037	B2	20080325	(200823)	EN			
US 20100009035	A1	20100114	(201005)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1389427 A1		EP 2003-17146	20030729
DE 10237479 A1		DE 2002-10237479	20020816
US 20050271768 A1	Provisional	US 2002-404126P	20020819

US 7348037 B2 Provisional US 2002-404126P 20020819
US 20050271768 A1 US 2003-637600 20030811
US 7348037 B2 US 2003-637600 20030811
US 20100009035 A1 Provisional US 2002-404126P 20020819
US 20100009035 A1 Div Ex US 2003-637600 20030811
US 20100009035 A1 US 2007-956881 20071214

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 20100009035 A1	Div Ex	US 7348037 B

PRIORITY APPLN. INFO: DE 2002-10237479 20020816
INT. PATENT CLASSIF.:
IPC ORIGINAL: A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-18 [I,A]; A23K0001-18 [I,C]
IPC RECLASSIF.: A01K0001-00 [I,A]; A01K0001-00 [I,C]; A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; C12P0013-00 [I,C]; C12P0013-12 [I,A]
ECLA: A23K0001-00B3; A23K0001-00C; A23K0001-16F4; A23K0001-16G1; C12P0013-12
USCLASS NCLM: 426/002.000; 426/060.000
NCLS: 426/007.000
BASIC ABSTRACT:

EP 1389427 A1 UPAB: 20090430

NOVELTY - Animal-feed additive comprises fermentation liquor containing one or more cysteine compounds from L-cysteine, L-cystine, thiazolidines, and/or their salts, and 2-100% of the further non-cellular ingredients of the fermentation liquor.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for production of feed additive comprising separating the biomass completely (100%) from fermentation liquors containing cysteine compounds from L-cysteine, L-cystine and thiazolidines, and/or their salts, and optionally concentrating the mixture so obtained by removal of water.

USE - An additive in liquid or solid form for animal-feed.

ADVANTAGE - The additive is stable to digestion by animal stomachs. The non-cellular ingredients improve the nutritional effectiveness of the additive.

TECHNOLOGY FOCUS:

BIOTECHNOLOGY - Preferred Composition: The additives contains the biomass formed during the fermentation of the cysteine-compound-producing microorganisms at 0-100%.

Preferred Component: The additives contains chemical compound(s) from the glutathione, cystathionine, biotin, thiamin, liponic acid, coenzyme A and/or L-methionine.

Preferred Process: The feed additive is produced by drying, spray drying, spray granulation and/or granulation. For the preparation of the fermentation liquor containing cysteine compounds, L-cysteine-producing bacteria, fungi or yeasts are cultivated in a fermentation medium. The process further comprises electrochemical reduction (electrolysis) of the L-cystine to L-cysteine in first and/or second steps; acidification with a concentrated mineral acid in first and/or second steps; addition of a reducing agent to first, second and/or third steps; use of a protecting gas in first second and/or third steps; addition of an oxidizing agent to first second and/or third steps; addition of one or more cysteine compounds from L-cysteine, L-cystine and/or thiazolidines to first second and/or third steps, the added amount of cysteine compound being such that the total concentration, optionally including its salts, in the animal-feed additive is 1-98 weight%; addition of auxiliary substances to

first, second and/or third steps, for stabilization and increasing the storability, from silicas, silicates, stearates, meals, brans, cereal flours, flours; silicas, silicates, starches and sugars; or conversion of the substances into a form stable in the animal's stomach by coating with film-forming agents.

INORGANIC CHEMISTRY - Preferred Material: The salts of the cysteine compounds are sodium, potassium, ammonium, magnesium or calcium salt. The mineral acid is sulfuric acid. The oxidizing agent is oxygen (O2) or hydrogen peroxide (H2O2). The protecting gas is nitrogen (N2).

ORGANIC CHEMISTRY - Preferred Material: The reducing agent is vitamin C, vitamin E, formic acid and/or their salts. Preferred Composition: The additive contains 1-98 weight% of cysteine compound(s) from group L-cysteine, L-cystine and thiazolidines, optionally including their salts. The thiazolidine content is at least 0.001 (preferably at least 0.1) weight% or at least traces.

POLYMERS - Preferred Material: The film-forming agent is metal carbonates, silicas, silicates, alginates, stearates, starches, rubbers or cellulose ethers.

EXTENSION ABSTRACT:

SPECIFIC COMPOUNDS - The thiazolidines are 2-methyl-thiazolidine-2,4-dicarboxylic acid, 2-carboxymethyl-thiazolidine-2,4-dicarboxylic acid, 2-carboxyethyl-thiazolidine-2,4-dicarboxylic acid, or thiazolidine-2,4-dicarboxylic acid.

EXAMPLE - Fermentation liquor was centrifuged for 20 minutes in a centrifuge at 3500 rpm and at room temperature. Each of centrifuge liquor (1317 g) and the original fermentation liquor were mixed. The resulting 2634 g were then dried to 400 g in 4.5 hours in an evaporator. An L-cysteine concentration of 13.2 g/kg was determined in the resulting product. The concentration of L-cysteine was 9.7 g/kg. The concentration of the thiazolidine was estimated at 26 g/kg. The content of total dry mass was 49.7 weight%.

FILE SEGMENT: CPI; GMPI

MANUAL CODE: CPI: A12-V; A12-W09; B03-G; B03-H; B05-A01A; B05-A01B; B05-C01; B05-C03; B05-C05; B05-C08; B07-F01; B10-A04; B10-B02D; B11-A01; C03-F; C03-H; C05-A01A; C05-A01B; C05-C01; C05-C03; C05-C05; C05-C08; C07-F01; C10-A04; C10-B02D; C11-A01; D03-G01; D05-A04A; E03; E07-A02B; E07-F01; E10-A04A; E10-B02D1; E31-A05; E31-D02; E31-F04; E31-H; E32-A04; E33-F; E34-B04; E34-D03

L61 ANSWER 4 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN

ACCESSION NUMBER: 2002-583478 [200262] WPIX

DOC. NO. CPI: C2002-164902 [200262]

TITLE: Preparation of a composition for regulating animal growth by mixing cysteamine or its salts with an inclusion compound such as a cyclodextrin or its derivatives

DERWENT CLASS: A97; B05; C03; D13; E16

INVENTOR: CHEN J; CHI F; LU T S; WEN Q; WEN Q T; CHI H; LU T

PATENT ASSIGNEE: (CHEN-I) CHEN J; (CHIF-I) CHI F; (HUAK-N) HUAKUODA ANIMAL SCI TECH I.P.2 CO LTD; (HUAK-N) HUAKUODA BIOCHEMICAL IND CO LTD; (LUTS-I) LU T S; (WALC-N) WALCOM ANIMAL SCI I.P.2 LTD; (WALC-N) WALCOM ANIMAL SCI LTD; (WENQ-I) WEN Q T; (WALC-N) WALCOM ANIMAL SCI IP2 LTD

COUNTRY COUNT: 99

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

WO	2002048110	A2	20020620	(200262)*	EN	44[0]	<--
AU	2002038425	A	20020624	(200267)	EN		<--
CN	1358499	A	20020717	(200268)	ZH		<--
KR	2003069182	A	20030825	(200382)	KO		<--
BR	2001016076	A	20031216	(200404)	PT		<--
US	20040033985	A1	20040219	(200414)	EN		<--
EP	1401290	A2	20040331	(200424)	EN		<--
CN	1527670	A	20040908	(200478)	ZH		<--
US	20050004075	A1	20050106	(200504)	EN		<--
JP	2005503105	T	20050203	(200516)	JA	64	<--
ZA	2003003877	A	20050223	(200519)	EN	54	<--
MX	2003004764	A1	20050301	(200568)	ES		<--
NZ	526076	A	20051028	(200581)	EN		<--
CN	1144585	C	20040407	(200613)	ZH		<--
RU	2284183		20060927	(200664)	RU		
CN	1813559	A	20060809	(200675)	ZH		
IN	2003DN00768	A	20070119	(200726)	EN		
KR	832636	B1	20080527	(200869)	KO		
IN	219447	B	20080627	(200966)	EN		
CN	100452984	C	20090121	(200967)	ZH		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002048110 A2		WO 2001-EP14628	20011212
CN 1358499 A		CN 2000-132107	20001213
CN 1144585 C		CN 2000-132107	20001213
BR 2001016076 A		BR 2001-16076	20011212
CN 1527670 A		CN 2001-820603	20011212
EP 1401290 A2		EP 2001-986869	20011212
NZ 526076 A		NZ 2001-526076	20011212
BR 2001016076 A	PCT Application	WO 2001-EP14628	20011212
US 20040033985 A1	PCT Application	WO 2001-EP14628	20011212
EP 1401290 A2	PCT Application	WO 2001-EP14628	20011212
US 20050004075 A1	CIP of	WO 2001-EP14628	20011212
JP 2005503105 T	PCT Application	WO 2001-EP14628	20011212
MX 2003004764 A1	PCT Application	WO 2001-EP14628	20011212
NZ 526076 A	PCT Application	WO 2001-EP14628	20011212
RU 2284183 C2	PCT Application	WO 2001-EP14628	20011212
IN 2003DN00768 A	PCT Application	WO 2001-EP14628	20011212
KR 832636 B1	PCT Application	WO 2001-EP14628	20011212
IN 219447 B	PCT Application	WO 2001-EP14628	20011212
AU 2002038425 A		AU 2002-38425	20011212
JP 2005503105 T		JP 2002-549641	20011212
RU 2284183 C2		RU 2003-121238	20011212
IN 2003DN00768 A		IN 2003-DN768	20030519
IN 219447 B		IN 2003-DN768	20030519
IN 219447 B		IN 2003-DN768	20030519
ZA 2003003877 A		ZA 2003-3877	20030520
MX 2003004764 A1		MX 2003-4764	20030528
KR 2003069182 A		KR 2003-707909	20030613
KR 832636 B1		KR 2003-707909	20030613
US 20040033985 A1		US 2003-432584	20030910
US 20050004075 A1	CIP of	US 2003-432584	20030910
US 20050004075 A1		US 2004-885261	20040706
CN 1813559 A		CN 2006-10006415	20011212
CN 100452984 C		CN 2001-820603	20011212

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002038425 A	Based on	WO 2002048110 A
BR 2001016076 A	Based on	WO 2002048110 A
EP 1401290 A2	Based on	WO 2002048110 A
JP 2005503105 T	Based on	WO 2002048110 A
MX 2003004764 A1	Based on	WO 2002048110 A
NZ 526076 A	Based on	WO 2002048110 A
RU 2284183 C2	Based on	WO 2002048110 A
KR 832636 B1	Previous Publ	KR 2003069182 A
KR 832636 B1	Based on	WO 2002048110 A

PRIORITY APPLN. INFO: CN 2000-132107 20001213
INT. PATENT CLASSIF.:
MAIN: A61K0031-195; C07D; C07D0213-00
IPC ORIGINAL: A23K0001-16 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-16 [I,C]; A61K0031-095 [I,A]; A61K0031-095 [I,A]; A61K0031-095 [I,C]; A61K0031-095 [I,C]; A61K0031-13 [I,A]; A61K0031-13 [I,A]; A61K0031-13 [I,C]; A61K0031-13 [I,C]; A61K0031-185 [I,C]; A61K0031-195 [I,A]; A61K0031-198 [I,A]; A61K0047-40 [I,A] ; A61K0047-40 [I,A]; A61K0047-40 [I,C]; A61K0047-40 [I,C] ; A61K0047-48 [I,A]; A61K0047-48 [I,A]; A61K0047-48 [I,C] ; A61K0047-48 [I,C]; A61P0043-00 [I,A]; C07D0213-00 [I,A] ; C07D0213-00 [I,A]; C07D0213-00 [I,C]
IPC RECLASSIF.: A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-18 [I,A]; A23K0001-18 [I,C]; A61K0031-095 [I,A]; A61K0031-095 [I,C]; A61K0031-13 [I,A] ; A61K0031-13 [I,C]; A61K0031-145 [I,A]; A61K0031-145 [I,C]; A61K0047-32 [I,A]; A61K0047-32 [I,C]; A61K0047-34 [I,A]; A61K0047-34 [I,C]; A61K0047-38 [I,A]; A61K0047-38 [I,C]; A61K0047-40 [I,A]; A61K0047-40 [I,C]; A61K0047-48 [I,A]; A61K0047-48 [I,C]; A61K0009-16 [I,A]; A61K0009-16 [I,C]; A61K0009-52 [I,A]; A61K0009-52 [I,C]; A61P0003-00 [I,A]; A61P0003-00 [I,C]; A61P0043-00 [I,A]; A61P0043-00 [I,C]
ECLA: A23K0001-00B1; A23K0001-00B3; A23K0001-16D; A23K0001-16L; A23K0001-18M1
USCLASS NCLM: 514/058.000
NCLS: 514/665.000
JAP. PATENT CLASSIF.:
MAIN/SEC.: A23K0001-16 301 D; A23K0001-16 305 Z; A61K0031-145; A61K0047-32; A61K0047-34; A61K0047-38; A61K0047-40; A61K0009-16; A61K0009-52; A61P0003-00 171; A61P0043-00 171
FTERM CLASSIF.: 2B150; 4C076; 4C201; 4C206; 4C206/AA01; 4C206/AA02; 4C076/AA31; 4C076/AA54; 4C076/AA94; 2B150/AB04; 2B150/AE16; 2B150/AE34; 2B150/AE36; 2B150/AE40; 2B150/AE48; 2B150/AE53; 4C076/BB01; 4C076/BB34; 4C076/CC30; 2B150/DA13; 2B150/DA20; 2B150/DC16; 2B150/DD21; 2B150/DJ05; 2B150/DJ06; 2B150/DJ10; 2B150/DJ28; 4C076/EE08.H; 4C076/EE09.H; 4C076/EE23.H; 4C076/EE32.H; 4C076/EE33.H; 4C076/EE38.H; 4C076/EE39.Q; 4C076/FF25; 4C076/FF31; 4C076/FF63; 4C076/GG12; 4C076/GG16; 4C206/JA52; 4C206/MA03; 4C206/MA05; 4C206/MA56; 4C206/MA57; 4C206/MA72; 4C206/NA12; 4C206/ZC03; 4C206/ZC61
BASIC ABSTRACT:
WO 2002048110 A2 UPAB: 20090218

NOVELTY - A novel method of preparing a composition for regulating animal growth comprises preparing cysteamine or its salts, and mixing the cysteamine or salt with cyclodextrin or its derivatives in a reactor.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a composition for regulating growth of animals comprising 1-95wt.% cysteamine or its salt and inclusion compound host materials composition including a stabilizer selected from cyclodextrin or its derivatives.

USE - The cysteamine-containing compositions when ingested by farm animals have activity in increasing body weight. The compositions can be used for regulating animal growth (claimed). They can be used as an animal feed or animal feed additive (claimed). They can be used for regulating the growth of e.g. swine, rabbits, quails, sheep, cattle or chickens.

ADVANTAGE - The inclusion compound host materials such as cyclodextrin act as molecular capsules to engulf the molecules of cysteamine, whereby cysteamine in the composition is protected and insulated from light, heat, air and moisture of the surroundings. The stability of cysteamine is thus preserved. The compositions may be stored for a relatively long time before use. The activity of the composition is preserved not only during storage but more importantly until it reaches the intestines of the animals.

TECHNOLOGY FOCUS:

ORGANIC CHEMISTRY - The mixing of the cysteamine or its salts with the cyclodextrin or its derivatives may be performed under the protection of an inert substance. The method may comprise:

(a) heating the cysteamine or its salts and the cyclodextrin or its derivatives while mixing at 25-40 degreesC;

(b) stirring the cysteamine or its salts and the cyclodextrin or its derivatives to form a first mixture;

(c) sieving the first mixture through a mesh screen to form a second mixture;

(d) drying the second mixture at 40-50 degreesC;

(e) mixing the second dried mixture with at least one of fillers, disintegrants, and binders to form a third mixture;

(f) pelleting the third mixture to form granules of 0.28-0.90mm diameter.

The stabilizer may be e.g. cyclodextrin (-CD), methyl beta-cyclodextrin (M-beta-CD), hydroxypropyl beta-cyclodextrin (HP-beta-CD), hydroethyl beta-cyclodextrin (HE-beta-CD), poly-cyclodextrin, ethyl beta-cyclodextrin (E-beta-CD) or branched cyclodextrin. The compositions may have coating materials e.g. glucose or fructose derivatives of phthalic acid, takh, formogelatine, ethyl acetate, or isopropyl acetate.

POLYMERS - The coating materials on the granules may be made from cellulose acetate phthalate, polyethylene glycol terephthalate, polymethyl vinyl ether, starch acetate phthalate, methyl cellulose phthalate, acrylic and methacrylic copolymers, or partly esterified substance of maleic anhydride copolymer, The stabilizer may also be poly-cyclodextrin. The fillers may be powdered cellulose, starch or calcium sulfate. The binders and disintegrants may be hydropropyl starch, microbial alginate, microcrystalline cellulose or starch.

EXTENSION ABSTRACT:

ADMINISTRATION - The compositions can be used in an amount of 250-700mg/kg of animal feed. A cysteamine-containing composition included 30wt.% cysteamine, 20wt.% inclusion host compound materials and coating materials, 26wt.% fillers, 23.9wt.% disintegrants and binders and 0.1wt.% flavoring and smelling agents. The composition comprised 12-17wt.% of the inclusion host compound materials including mainly cyclodextrin and 1-5wt.% coating materials. The test animals were weaning piglets of about 35 days old. There was a test group and a control group of 80 weaning piglets each. The test piglets were fed with a basal feed added with

500mg/kg of the cysteamine-containing composition. The piglets in the control group were fed with the same basal feed but without the cysteamine-containing composition. The duration of the experiment was 28 days. The results showed that the mean daily gain in body weight of each piglet in the test group was 512g while that of in the control group was 456g. It was calculated that the mean daily gain in body weight of each piglet in the test group was 12.28% more than that in the control group.

EXAMPLE - To 4080g of 75wt.% cysteamine.HCl solution in EtOH under N2 was added 1200g beta-cyclodextrin into the reactor similarly under the protection of N2 gas. The mixture was then heated for 3 hours at 40 degreesC. Heating was then stopped and stirring continued for 2 hours, the resulting products were then grounded and sieved through a screen (e.g. 40-mesh) filter after the products had been vacuum dried at 40-50 degreesC. In a tank-type mixer, 4200g of the cysteamine which had undergone the inclusion process, 2600g fillers, 1200g disintegrants and 1700g binders were added under the protection of a dry surroundings. These ingredients were then thoroughly mixed, and a suitable amount of anhydrous EtOH was added and mixed. The resulting mixture was a soft material with moderate hardness, that could be shaped into a ball by a light hold of palms. The mixture was then formed into granules.

FILE SEGMENT: CPI
MANUAL CODE: CPI: A12-W09; B04-C02A; B04-C02B1; B04-C02B2; B04-C03B; B04-C03C; B05-A01B; B05-C05; B10-B04B; C04-C02A; C04-C02B1; C04-C02B2; C04-C03B; C04-C03C; C05-A01B; C05-C05; C10-B04B; D03-G01; D03-H01T2; E06-A03; E10-B03B2; E10-G02H2; E34-D02

L61 ANSWER 5 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-075392 [200007] WPIX
DOC. NO. CPI: C2000-021912 [200007]
TITLE: Preparation of zinc mineral used in fodder for feeding chicken to produce nutritious egg - involves coating tablet containing adhesive paste, specific zinc compound and amino acid by algin sodium and carboxymethyl cellulose aqueous solution
DERWENT CLASS: A97; D13
INVENTOR: INOUE H; INOUE K; INOUE Y; KATAYAMA H; KATAYAMA T
PATENT ASSIGNEE: (INOU-I) INOUE H; (INOU-I) INOUE K; (INOU-I) INOUE Y; (KATA-I) KATAYAMA H; (KATA-I) KATAYAMA T
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 11313618	A	19991116	(200007)*	JA	3[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 11313618 A		JP 1998-162722	19980506

PRIORITY APPLN. INFO: JP 1998-162722 19980506
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A23K0001-10 [I,A]; A23K0001-16 [I,A]; A23K0001-175 [I,A]; A61K0033-30 [I,A]; A61P0003-00 [I,A]
JAP. PATENT CLASSIF.:
MAIN/SEC.: A23K0001-10 Z; A23K0001-16 301 G; A23K0001-16 305 A; A23K0001-175; A61K0033-30 (AFC); A61P0003-00 171

FTERM CLASSIF.: 2B150; 4C086; 4C201; 4C206; 2B150/AA01; 4C086/AA01; 2B150/AA05; 2B150/AB02; 2B150/AB05; 2B150/AB08; 2B150/AB20; 2B150/AE01; 2B150/AE05; 2B150/AE31; 2B150/AE33; 2B150/AE34; 2B150/CE02; 2B150/DA34; 2B150/DA44; 2B150/DA45; 2B150/DA49; 2B150/DH09; 2B150/DJ08; 2B150/DJ10; 4C086/HA03; 4C086/ZC61

BASIC ABSTRACT:

JP 11313618 A UPAB: 20050830

Preparation of zinc mineral used in fodder comprises an adhesive paste e.g. starch, wheat flour is added to zinc compound and amino acid to form tablet/granule. Zinc compound is chosen from its oxide, carbonate, citrate or tartarate and amino acid is from methionine, tryptophan, cystine or threonine. The tablet is coated by algin sodium and carboxymethyl cellulose aqueous solutions. Oyster shell powder is coated on tablet which is dried.

USE - Used in fodder for feeding chicken to produce nutritious egg and meat.

ADVANTAGE - Since enteric coating is performed on the tablets, conversion of zinc compound into its chloride which damages physiological activities in stomach is prevented. Sorption of zinc compound by the fodder is comparatively better and zinc is efficiently consumed.

DOCUMENTATION ABSTRACT:

JP11313618

Preparation of zinc mineral used in fodder comprises an adhesive paste e.g. starch, wheat flour is added to zinc compound and amino acid to form tablet/granule.

Zinc compound is chosen from its oxide, carbonate, citrate or tartrate and amino acid is from methionine, tryptophan, cystine or threonine.

The tablet is coated by algin sodium and carboxymethyl cellulose aqueous solutions. Oyster shell powder is coated on tablet which is dried.

USE

Used in fodder for feeding chicken to produce nutritious egg and meat.

ADVANTAGE

Since enteric coating is performed on the tablets, conversion of zinc compound into its chloride which damages physiological activities in stomach is prevented. Sorption of zinc compound by the fodder is comparatively better and zinc is efficiently consumed.

EXAMPLE

4780 g of starch was added to 637 g of cystine and 575 g of zinc citrate to form a tablet. The tablet was coated with 5% sodium alginate solution to form a skin layer of 0.05 mm or more thickness.

The moisturized tablet was then coated with Oyster shell powder thrice to form zinc tablet.

FILE SEGMENT: CPI
MANUAL CODE: CPI: A03-A00A; A03-A04A1; A12-W04; D03-G01

L61 ANSWER 6 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-460561 [199939] WPIX
DOC. NO. CPI: C1999-135345 [199939]
TITLE: Continuous preparation of a finely divided natural colorant especially carotenoids, useful as food and animal feed additives
DERWENT CLASS: D13; E19; E24
INVENTOR: STEIN H; VIARDOF K; VIARDOT K; YANG B; BIN Y
PATENT ASSIGNEE: (STAM-C) DSM IP ASSETS BV; (HOFF-C) HOFFMANN LA ROCHE &

CO AG F; (HOFF-C) ROCHE VITAMINS INC; (STEI-I) STEIN H; (VIAR-I) VIARDOT K; (YANG-I) YANG B

COUNTRY COUNT: 37

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 937412	A1	19990825	(199939)*	EN	8[1]		<--
NO 9900852	A	19990824	(199945)	NO			<--
AU 9918362	A	19990909	(199949)	EN			<--
CA 2261456	A1	19990823	(200005)	EN			<--
CN 1231843	A	19991020	(200009)	ZH			<--
BR 9900776	A	20000328	(200029)	PT			<--
JP 2000186224	A	20000704	(200037)	JA	5		<--
KR 99072792	A	19990927	(200048)	KO	[1]		<--
MX 9901754	A1	20000201	(200123)	ES			<--
US 20010008644	A1	20010719	(200143)	EN			<--
AU 743535	B	20020131	(200222)	EN			<--
US 6406735	B2	20020618	(200244)	EN			<--
NO 315892	B1	20031110	(200375)	NO			<--
TW 565434	A	20031211	(200434)	ZH			<--
MX 224632	B	20041203	(200561)	ES			<--
EP 937412	B1	20060201	(200612)	EN			
CN 1173637	C	20041103	(200617)	ZH			<--
PH 1199900351	B1	20040211	(200618)	EN			<--
DE 69929641	E	20060413	(200629)	DE			
ES 2257828	T3	20060801	(200652)	ES			
DE 69929641	T2	20061214	(200701)	DE			
IN 1999CH00212	A	20070518	(200748)	EN			
KR 695589	B1	20070314	(200820)	KO			
BR 9900776	B1	20110531	(201168)	PT			
JP 4837812	B2	20111214	(201182)	JA	8		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 937412 A1		EP 1999-103239	19990219
CA 2261456 A1		CA 1999-2261456	19990211
DE 69929641 E		DE 1999-69929641	19990219
DE 69929641 T2		DE 1999-69929641	19990219
DE 69929641 E		EP 1999-103239	19990219
ES 2257828 T3		EP 1999-103239	19990219
DE 69929641 T2		EP 1999-103239	19990219
KR 99072792 A		KR 1999-5665	19990220
KR 695589 B1		KR 1999-5665	19990220
AU 9918362 A		AU 1999-18362	19990222
AU 743535 B		AU 1999-18362	19990222
BR 9900776 A		BR 1999-776	19990222
BR 9900776 B1		BR 1999-776	19990222
IN 1999CH00212 A		IN 1999-CH212	19990222
JP 2000186224 A		JP 1999-42594	19990222
MX 9901754 A1		MX 1999-1754	19990222
MX 224632 B		MX 1999-1754	19990222
TW 565434 A		TW 1999-102545	19990222
US 20010008644 A1		US 1999-255010	19990222
US 6406735 B2		US 1999-255010	19990222
CN 1231843 A		CN 1999-102900	19990223
CN 1173637 C		CN 1999-102900	19990223

NO 9900852 A NO 1999-852 19990223
NO 315892 B1 NO 1999-852 19990223
PH 1199900351 B1 PH 1999-351 19990223
JP 4837812 B2 JP 1999-42594 19990222

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 743535 B	Previous Publ	AU 9918362 A
DE 69929641 E	Based on	EP 937412 A
ES 2257828 T3	Based on	EP 937412 A
DE 69929641 T2	Based on	EP 937412 A
KR 695589 B1	Previous Publ	KR 9972792 A
NO 315892 B1	Previous Publ	NO 9900852 A
JP 4837812 B2	Previous Publ	JP 2000186224 A

PRIORITY APPLN. INFO: EP 1998-103113 19980223
INT. PATENT CLASSIF.:
MAIN: A23L0001-27; A23L0001-275; A61K0009-14; C07C0403-24
IPC ORIGINAL: A23L0001-27 [I,C]; A23L0001-27 [I,C]; A23L0001-275 [I,A]; A23L0001-275 [I,A]; A61K0009-14 [I,A]; A61K0009-14 [I,C]; C07C0403-24 [I,A]; C09B0061-00 [I,A]; C09B0067-04 [I,A]
IPC RECLASSIF.: A23L0001-27 [I,A]; A23L0001-27 [I,C]; A23L0001-275 [I,A]; C07C0403-00 [I,C]; C07C0403-24 [I,A]; C09B0061-00 [I,A]; C09B0061-00 [I,C]; C09B0067-00 [I,C]; C09B0067-04 [I,A]
ECLA: A23L0001-275B2; C07C0403-24
USCLASS NCLM: 426/073.000; 426/540.000
NCLS: 424/451.000; 424/456.000; 426/519.000; 426/520.000; 426/540.000; 516/077.000
JAP. PATENT CLASSIF.:
MAIN/SEC.: C07C0403-24; C09B0061-00 A; C09B0067-04
MAIN: C09B0061-00 A
SECONDARY: C07C0403-24; C09B0067-04
FTERM CLASSIF.: 4H006; 4H056; 4H006/AA02; 4H006/AA03; 4H006/AB10; 4H006/AD10; 4H006/AD40; 4H006/BB46; 4H006/BC50; 4H006/BC51; 4H006/UC12

BASIC ABSTRACT:

EP 937412 A1 UPAB: 20060115

NOVELTY - Continuous preparation of a pulverous carotenoid, retinoid or natural colorant comprises suspending the colorant in a water-immiscible organic solvent, rapidly heating to 100-250degreesC, rapidly mixing the obtained solution at 20-100degreesC with an aqueous solution of a swellable colloid, removing the organic solvent and converting the obtained dispersion to a pulverous preparation.

DETAILED DESCRIPTION - Continuous preparation of a pulverous carotenoid, retinoid or natural colorant comprises:

(1) suspending the colorant in a water-immiscible organic solvent optionally containing an antioxidant and/or oil;

(2) heating the suspension in a heat exchanger to 100-250degreesC, where the residence time in the heat exchanger is less than 5 sec.;

(3) rapidly mixing the obtained solution at 20-100degreesC with an aqueous solution of a swellable colloid optionally containing a stabilizer;

(4) removing the organic solvent; and

(5) converting the obtained dispersion to a pulverous preparation.

USE - The products are used for coloring foodstuffs and animal feeds.

ADVANTAGE - Powders which cover a very wide range of colors may be obtained. Reduced amounts of solvent are required. TECHNOLOGY FOCUS:

FOOD - The colorant has a particle size of less than 1.0 microns, preferably less than 0.4 microns. The suspension is heated 120-180

(preferably 140-170) degreesC with a residence time of 0.5-4 (preferably 1-3) sec. and the mixing temperature with the colloid is 50-80 degreesC. The organic solvent is dimethyl carbonate, ethyl formate, ethyl- or isopropyl acetate, methyl tert. butyl ether or methylene chloride.

The colorant is preferably a carotenoid. especially beta-carotene, beta-apo-4'-carotenal, beta-apo-8'-carotenal, beta-apo-12'-carotenal, beta-apo-8'-carotenic acid, astaxanthin, canthaxanthin, zeaxanthin, cryptoxanthin, citranaxanthin, lutein, lycopene, torulorodin aldehyde, torulorodin ethyl ester, neurosporaxanthin ethyl ester, zeta-carotene or dehydroplectaniaxanthin.

The swellable colloid is gelatin, starch (derivative), dextrin, pectin, gum arabic, octenylbutanedioate amylodextrin, milk protein, vegetable protein and their mixtures.

The antioxidant is ascorbic acid, ascorbyl palmitate, di-alpha-tocopherol, mixed tocopherols, lecithin, butyl-4-methoxy-phenol and their combinations.

The dissolution of the active ingredient is effected either indirectly (via the heat exchanger) or directly by mixing with steam. The precipitation of the colorant in the swellable colloid is effected continuously in a series-connected mixing device.

The obtained pulverous preparation contains 0.5-25 weight% active ingredient.

EXTENSION ABSTRACT:

EXAMPLE - Ascorbyl palmitate (1.0 kg) was dispersed in water (27.8 kg) at 60 degreesC. The dispersion pH was adjusted to 7.2-7.6 using 20% NaOH. Fish gelatin (3.4 kg) and sucrose (7.2 kg) were added and the mixture was then stirred to obtain a viscous clear matrix solution. - In a separate container, trans-beta-carotene crystals (0.75 kg) were dispersed in a mixture of dl-alpha-tocopherol (90 g), corn oil (330g) and ethyl acetate (7.5 kg). The carotene suspension was pumped continuously at 6 kg/hour to a heat exchanger heated to 160 degreesC (residence time 4 sec.) to solubilize the carotene. - The matrix solution was pumped (at 9.2 kg/hour) to a third container and mixed with the carotene solution. The emulsion was cooled in a second heat exchanger to 60 degreesC and the pressure was released (to atmospheric). The EtOAc was removed in a thin film evaporator. The resulting emulsion showed a particle size of the inner phase of 225 nm and was spray-dried to give a powder of 11.6% carotene content. The powder was well soluble in cold water with an intense red coloration.

FILE SEGMENT: CPI
MANUAL CODE: CPI: D03-G01; D03-H01E; E25-B03

L61 ANSWER 7 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-450817 [199742] WPIX
DOC. NO. CPI: C1997-143884 [199742]
TITLE: Finely-divided carotenoid or retinoid suspension without protective colloid - containing lecithin, mono-, di- or tri-glyceride of aliphatic poly:carboxylic acid etc. as emulsifier
DERWENT CLASS: D13; E24
INVENTOR: LUDDECKE E; LUEDDECKE E; SCHWEIKERT L
PATENT ASSIGNEE: (BADI-C) BASF AG
COUNTRY COUNT: 19

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
EP 795585	A1 19970917	(199742)*	DE	9[0]		<--
DE 19609538	A1 19970918	(199743)	DE	7[0]		<--

AU 9716202	A	19970918 (199746)	EN		<--
JP 10001616	A	19980106 (199811)	JA	27[0]	<--
CA 2199640	A	19970911 (199815)	EN		<--
BR 9701263	A	19981110 (199850)	PT		<--
MX 9701750	A1	19970901 (199850)	ES		<--
US 5895659	A	19990420 (199923)	EN		<--
AU 711746	B	19991021 (200002)	EN		<--
IL 120361	A	20010808 (200157)	EN		<--
EP 795585	B1	20011024 (200169)	DE		<--
DE 59705020	G	20011129 (200202)	DE		<--
MX 202457	B	20010618 (200235)	ES		<--
ES 2166926	T3	20020501 (200236)	ES		<--
JP 3884817	B2	20070221 (200716)	JA	11	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
EP 795585 A1		EP 1997-103860 19970307
DE 19609538 A1		DE 1996-19609538 19960311
IL 120361 A		IL 1997-120361 19970303
AU 9716202 A		AU 1997-16202 19970307
AU 711746 B		AU 1997-16202 19970307
DE 59705020 G		DE 1997-59705020 19970307
DE 59705020 G		EP 1997-103860 19970307
ES 2166926 T3		EP 1997-103860 19970307
MX 9701750 A1		MX 1997-1750 19970307
MX 202457 B		MX 1997-1750 19970307
CA 2199640 A		CA 1997-2199640 19970310
US 5895659 A		US 1997-813976 19970310
BR 9701263 A		BR 1997-1263 19970311
JP 10001616 A		JP 1997-55724 19970311
JP 3884817 B2		JP 1997-55724 19970311

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 711746 B	Previous Publ	AU 9716202 A
DE 59705020 G	Based on	EP 795585 A
ES 2166926 T3	Based on	EP 795585 A
JP 3884817 B2	Previous Publ	JP 10001616 A

PRIORITY APPLN. INFO: DE 1996-19609538 19960311

INT. PATENT CLASSIF.:

MAIN:	C07C0403-24
IPC ORIGINAL:	C09B0061-00 [I,A]
IPC RECLASSIF.:	A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23L0001-27 [I,C]; A23L0001-272 [I,A]; A23L0001-275 [I,A]; A23L0001-302 [I,C]; A23L0001-303 [I,A]; A23L0002-52 [I,C]; A23L0002-58 [I,A]; A61K0047-24 [N,A]; A61K0047-24 [N,C]; A61K0009-10 [I,A]; A61K0009-10 [I,C]; B01F0017-00 [I,A]; B01F0017-00 [I,C]; C09B0061-00 [I,A]; C09B0061-00 [I,C]; C09B0067-00 [I,C]; C09B0067-46 [I,A]
ECLA:	A23L0001-275B2; A61K0009-10; C07C0403-24; C09B0061-00; C09B0067-00P10D
ICO:	K61K0047:24

JAP. PATENT CLASSIF.:

MAIN/SEC.:	A23L0001-272; C09B0061-00 A

FTERM CLASSIF.: 4B018; 4H056; 4B018/LB08; 4B018/LE05; 4B018/LE06; 4B018/MA01; 4B018/MA08; 4B018/MB05; 4B018/MC01; 4B018/MC04; 4B018/MD08; 4B018/MD10; 4B018/MD94; 4B018/ME14; 4B018/MF02; 4B018/MF14

BASIC ABSTRACT:

EP 795585 A1 UPAB: 20050703

The preparation of a finely-divided carotinoid or retinoid suspension comprises dissolving the material in a volatile water-miscible organic solvent at 50-250°C (optionally under increased pressure) within 10 seconds and then immediately mixing the solution with an aqueous medium at 0-90°C in the absence of protective colloid and in the presence of a physiologically acceptable emulsifier.

Also claimed is a finely-divided carotinoid or retinoid suspension free from protective colloid contains an emulsifier chosen from lecithin, mono-, di- or tri-glycerides of aliphatic (optionally acetylated) polycarboxylic acids (eg citric or tartaric acid) or ascorbyl palmitate.

USE - The suspensions are used as dyestuffs for foodstuffs and fodder, especially drinks (claimed).

ADVANTAGE - The suspensions, which can be spray-dried to give powders, are easily handled, of adjustable colour tone and of high actives content and are readily diluted.

DOCUMENTATION ABSTRACT:

EP795585

The preparation of a finely-divided carotinoid or retinoid suspension comprises dissolving the material in a volatile water-miscible organic solvent at 50-250°C (optionally under increased pressure) within 10 seconds and then immediately mixing the solution with an aqueous medium at 0-90°C in the absence of protective colloid and in the presence of a physiologically acceptable emulsifier.

Also claimed is a finely-divided carotinoid or retinoid suspension free from protective colloid contains an emulsifier chosen from lecithin, mono-, di- or tri-glycerides of aliphatic (optionally acetylated) polycarboxylic acids (eg citric or tartaric acid) or ascorbyl palmitate.

USE

The suspensions are used as dyestuffs for foodstuffs and fodder, especially drinks (claimed).

ADVANTAGE

The suspensions, which can be spray-dried to give powders, are easily handled, of adjustable colour tone and of high actives content and are readily diluted.

EXAMPLE

12.5g β-Carotene was dissolved in 490 g of a solution of 9 g 'Emulfluid E' (RTM; partly hydrolysed lecithin) and 1.8 g d,l-α-tocopherol in iso-PrOH. The solution (2 l/hour) was mixed with 775g iso-PrOH (3 l/hour, heated to 220°C by heat-exchange) in a first mixer so as to give a dwell time of 0.35 seconds and to produce a molecular solution at 190°C. The mixture was fed to a second mixer and turbulently mixed with 7800 g water (30 l/hour) to give a clear orange suspension containing 0.1 weight% active agent, average particle size 70 nm. (LJ)

PREFERRED MATERIALS

The organic solvent is an alcohol, ketone, ester, acetal and/or ether, especially acetone, 1,2-butanediol-1-methyl ether, 1,2-propanediol-1-n-propyl ether, EtOH, n-PrOH and/or iso-PrOH.

The emulsifier is lecithin; a fatty acid salt; a mono, di- or tri-glyceride of a 12-18C fatty acid or of an aliphatic, optionally acetylated, polycarboxylic acid optionally esterified with a

fruit acid; a sugar fatty acid ester; or a polyglycerol ester of a 12-18C fatty acid.

PREFERRED COMPOSITION

The carotinoid/retinoid concentration of the suspension is 0.1-100g/l and the weight ratio emulsifier:carotinoid/retinoid is 0.1-5, especially 0.5-2.

An antioxidant, especially tocopherol, is also present in the suspension.

The suspensions have particle size <1μm, especially 0.03-0.2 μm.

PREFERRED PROCESS

The carotinoid/retinoid is suspended in a volatile, water-miscible organic diluent or solvent, especially in the same solvent as is to be used for the dissolution. The dissolution is carried out continuously in the first of 2 connected mixers.

FILE SEGMENT: CPI
MANUAL CODE: CPI: D03-G01; D03-H01E; E05-G09D; E07-A02B; E10-E04G; E10-E04K; E10-G02G2; E25-B03

L61 ANSWER 8 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-367613 [199548] WPIX
DOC. NO. CPI: C1995-159943 [199548]
TITLE: Protection of bioactive substances in ruminant feed - by addition as granules with core of bioactive substance, and hydrophobic coating of oil, fat, or fatty ester, with surfactant and talc powder
DERWENT CLASS: B07; C07; D13
INVENTOR: IKEDA T; KITAMURA N; SHIBAHARA S
PATENT ASSIGNEE: (AJIN-C) AJINOMOTO CO INC; (AJIN-C) AJINOMOTO KK
COUNTRY COUNT: 13

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 678246	A1	19951025	(199548)*	EN	12[0]		<--
NO 9501473	A	19951023	(199550)	NO			<--
JP 07289172	A	19951107	(199602)	JA	7[0]		<--
CA 2147432	A	19951021	(199608)	EN			<--
US 5676966	A	19971014	(199747)	EN	6[0]		<--
CN 1125057	A	19960626	(199748)	ZH			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 678246 A1		EP 1995-105930	19950420
JP 07289172 A		JP 1994-81500	19940420
NO 9501473 A		NO 1995-1473	19950419
US 5676966 A		US 1995-424639	19950419
CA 2147432 A		CA 1995-2147432	19950420
CN 1125057 A		CN 1995-105726	19950420

PRIORITY APPLN. INFO: JP 1994-81500 19940420
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A23K0001-00 [I,A]; A23K0001-00 [I,C]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-175 [I,A]; A23K0001-175 [I,C]; A23K0001-18 [I,A]; A23K0001-18 [I,C]
ECLA: A23K0001-00B3B
JAP. PATENT CLASSIF.:

MAIN/SEC.: A23K0001-16 301 H; A23K0001-16 303 C; A23K0001-16 305 B; A23K0001-175; A23K0001-18 B

FTERM CLASSIF.: 2B005; 2B150; 2B150/AA02; 2B005/BA06; 2B150/CC14; 2B150/CD13; 2B150/CD30; 2B150/CE01; 2B150/CE05; 2B150/CE16; 2B150/CJ02; 2B150/DA32; 2B150/DA44; 2B150/DA45; 2B150/DA48; 2B150/DA49; 2B150/DA50; 2B150/DB30; 2B150/DC08; 2B150/DC13; 2B150/DE02; 2B150/DE03; 2B150/DE04; 2B150/DE05; 2B150/DE06; 2B150/DE08; 2B150/DE09; 2B150/DE10; 2B150/DE11; 2B150/DE12; 2B150/DE14; 2B150/DE15; 2B150/DF05; 2B150/DF09; 2B150/DF10; 2B150/DF13; 2B150/DF15; 2B150/DG02; 2B150/DG12; 2B150/DG16; 2B150/DG17; 2B150/DJ01; 2B150/DJ03; 2B150/DJ13; 2B150/DJ14

BASIC ABSTRACT:

EP 678246 A1 UPAB: 20050513

Granular additive compsn. for ruminant feed, comprising a core of biologically active substance and a coating containing (all by weight): (a) 65-90% of hydrophobic protecting substance(s), i.e., animal or plant fat, hardened animal or plant oil or fat, or fatty acid ester; (b) 2-20% of surface active agent compatible with (a); and (c) 8-30% of talc powder is new.

USE - A wide variety of bioactive substances can be admin. orally, protected from degradation in the rumen by the coating, but released and absorbed in the digestive organs after the abomasum. These include nutrients, e.g., amino acids and their antibiotics insecticides and vermifuges, hormones, and enzymes.

ADVANTAGE - The protective coating is safe and economical, and protects even water soluble bioactives, inclusion of talc does not effect the protection, but improves release of the bioactive substance in the post-rumen digestive system, which is difficult with oil/fat protectin alone.

DOCUMENTATION ABSTRACT:

EP678246

Granular additive compsn. for ruminant feed, comprises a core of biologically active substance and a coating containing (all by weight):

(a) 65-90% of hydrophobic protecting substance(s), i.e., animal or plant fat, hardened animal or plant oil or fat, or fatty acid ester;

(b) 2-20% of surface active agent compatible with (a); and

(c) 8-30% of talc powder.

USE

A wide variety of bioactive substances can be admin. orally, protected from degradation in the rumen by the coating, but released and absorbed in the digestive organs after the abomasum. These include nutrients, e.g., amino acids and their antibiotics insecticides and vermifuges, hormones, and enzymes.

ADVANTAGE

The protective coating is safe and economical, and protects even water soluble bioactives, inclusion of talc does not effect the protection, but improves release of the bioactive substance in the post-rumen digestive system, which is difficult with oil/fat protectin alone.

EXAMPLE

A mixture of L-lysine.HCl (325 g), talc (172.5 g, with mean dia. ≤ 20μ), Na carboxymethylcellulose (2.5 g) and water (135g) was kneaded, extruded through 1.5 mm mesh, and cylindrical granules spheronised, and dried in a space fluidised bed to provide cores with dia. 1.0-2.5 mm.

The coating was molten mixture of soybean lecithin (5 pts.), talc as above (10 pts.) and hardened beef tallow (85 pts.) applied at a rate of 43 pts. coating/100 pts. core. The prod. was sieved to have

a mean granule dia. of 1-5 mm.

For testing, buffers were made up to simulate rumen, abomasum, and small intestine juices. The granule sample (ca. 1 kg) was shaken first for 24 hr. at 39°C in ruminal buffer (200 ml). Assay of the fluid showed only 3% of the lysine was released.

The sample was recovered and shaken in abomasmal buffer (200 ml) at 39°C for 1 hr., followed by assay as above. recovered again, and shaken in small intestinal buffer (200 ml) at 39°C for hr., followed by assay. These two releases were added, to give a post ruminal release of 78% of the lysine.(JM)

PREFERRED PRODUCT

The surface active agent (b) is lecithin or a higher unsatd. fatty acid. The talc (c) is as a fine powder with mean. dia. ≤40 μ, and is opt. treated first with the surface active agent.

The final granular prod. has a mean dia. of 1-3 mm and specific gravity of 1.0-1.5.

FILE SEGMENT: CPI
MANUAL CODE: CPI: B02-Z; B03-L; B04-B01C; B04-D01; B04-J01; B04-L01; B04-N04; B10-B02J; B10-G02; B12-M11D; B14-B03; B14-B04B; C02-Z; C03-L; C04-B01C; C04-D01; C04-J01; C04-L01; C04-N04; C10-B02J; C10-G02; C12-M11D; C14-B03; C14-B04B; D03-G01

L61 ANSWER 9 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-143761 [199519] WPIX
DOC. NO. CPI: C1995-066000 [199519]
TITLE: Highly digestible feed additive - comprises core active ingredient with coating layers contg calcium alginate, fine calcium carbonate powder and calcium alginate.
DERWENT CLASS: D13
INVENTOR: SATO K
PATENT ASSIGNEE: (SHIR-N) SHIROISHI CALCIUM KK
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 07067545	A	19950314	(199519)*	JA	8[1]		<--
JP 3361364	B2	20030107	(200306)	JA	7		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 07067545 A		JP 1993-213615	19930830
JP 3361364 B2		JP 1993-213615	19930830

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 3361364 B2	Previous Publ	JP 07067545 A

PRIORITY APPLN. INFO: JP 1993-213615 19930830
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A23K0001-16 [I,A]; A23K0001-18 [I,A]
JAP. PATENT CLASSIF.:
MAIN/SEC.: A23K0001-16 303 D; A23K0001-16 305 B; A23K0001-18 B

FTERM CLASSIF.: 2B005; 2B150; 2B150/AA02; 2B150/AE40; 2B150/AE50; 2B005/BA06; 2B150/DA45; 2B150/DA48; 2B150/DA49; 2B150/DE01; 2B150/DJ01; 2B150/DJ08; 2B150/DJ22

BASIC ABSTRACT:

JP 07067545 A UPAB: 20050511

Feed additive for ruminant animal comprises 55 to 65 wt% of core of active ingredient, the first coating layer comprising calcium alginate, the second coating layer comprising fine calcium carbonate powder and the third coating layer comprising calcium alginate.

ADVANTAGE - The feed additive shows high digestibility.

FILE SEGMENT: CPI
MANUAL CODE: CPI: D03-G01

L61 ANSWER 10 OF 10 WPIX COPYRIGHT 2012 THOMSON REUTERS on STN
ACCESSION NUMBER: 1974-87315V [197451] WPIX
TITLE: Granular animal food additive, coated with anhydrous powder - comprising puffed calcium phosphates, trace elements, utamines and absorbed liquid appetiser
DERWENT CLASS: C03; D13
PATENT ASSIGNEE: (CEDA-C) SARAP-CEDIA
COUNTRY COUNT: 3

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
BE 817924	A	19741118	(197451)*	FR			<--
GB 1457643	A	19761207	(197650)#	EN			<--
CH 588818	A	19770615	(197729)#	DE			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
BE 817924 A		BE 1974-817924	19740722
CH 588818 A		CH 1974-10152	19740723
GB 1457643 A		GB 1974-34630	19740806

PRIORITY APPLN. INFO: BE 1974-817924 19740722
CH 1974-10152 19740723
GB 1974-34630 19740806

INT. PATENT CLASSIF.:
IPC RECLASSIF.: A23K0001-00 [I,A]; A23K0001-02 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-175 [I,A]; A23K0001-175 [I,C]
ECLA: A23K0001-00B1; A23K0001-02; A23K0001-16B; A23K0001-16L; A23K0001-175F; A23K0001-175J

BASIC ABSTRACT:

BE 817924 A UPAB: 20050414

Animal foodstuff additive comprises puffed granules of mono- or di-calcium phosphate, having a particle size of 0.2-2 mm. which are capable of absorbing 8-10 weight% liquid; powdered trace elements; vitamins; and appetite-promoting liquid, absorbed by the granules, such as molasses, autolysed yeast, soya lecithin or a mixture The granules have a final desiccating coating of anhydrous dicalcium phosphate or magnesium hydroxide, or some other anhydrous substance. The particle size suits many animals, pelleting is avoided, the product is cheap and is stable to normal atmospheric conditions.

FILE SEGMENT: CPI
MANUAL CODE: CPI: C03-L; C04-B04A; C04-D01; C05-B02A; C12-L09;

C12-M11; D03-G01

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L36  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER:         2010:704292  HCAPLUS  Full-text
DOCUMENT NUMBER:          154:141930
TITLE:                    Edible coating composition
PATENT ASSIGNEE(S):       FMC Corporation, USA
SOURCE:                   Israeli, 44pp., Addn. to Israeli 144,352.
                          CODEN: ISXXAQ
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   5
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     IL 149282            A     20100531    IL 2000-149282         20000207 <--
     US 6432448           B1    20020813    US 2000-491724         20000127 <--
     EP 1430889           A1    20040623    EP 2004-75509          20000207 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
     IL 144352            A     20061031    IL 2000-144352         20000207 <--
     WO 2001032150        A1    20010510    WO 2000-US21397        20000804 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 20040137043       A1    20040715    US 2003-740321         20031218 <--
PRIORITY APPLN. INFO.:                     US 1999-162514P     P   19991029 <--
                                           US 1999-167407P     P   19991124 <--
                                           US 1999-172526P     P   19991217 <--
                                           US 2000-491724      A   20000127 <--
                                           IL 2000-144352      A0  20000207 <--
                                           WO 2000-US21397     W   20000804 <--
                                           US 1999-119005P     P   19990208 <--
                                           US 1999-133092P     P   19990507 <--
                                           EP 2000-907193      A3  20000207 <--
                                           WO 2000-US3130      W   20000207 <--
                                           US 2002-165022      A1  20020607 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB    The invention relates to edible, hardenable and prompt release coating compns.
      comprising microcryst. cellulose (MCC), carrageenan (CGN) and at least one of
      a strengthening polymer or a plasticizer.  The coatings of the present
      invention can be applied to pharmaceutical, including nutriceutical and
      veterinary solid dosage forms, confectionery, seeds, animal feeds,
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fertilizers, pesticide tablets and granules, and foods. The edible coating compns. are readily dispersed in aqueous media and, when applied as a coating and ingested by, for example, a human, do not significantly retard or extend release of active ingredient(s) from a substrate coated therewith. The edible coating composition comprises 5 - 25 % microcryst. cellulose, 10 - 16 % ι-carrageenan and 2 - 10 % hydroxylated soy lecithin. Furthermore, the edible coating composition may contain lactose, propylene glycol alginate, hydroxyethylcellulose or polyvinylpyrrolidone, polyethylene glycol and a coloring agent. The strengthening polymer is at least one member selected from the group consisting of hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose and polyvinylpyrrolidone. The surface active agent is at least one member selected from the group consisting of sodium lauryl sulfate, hydroxylated soy lecithin, polysorbates and block copolymers of propylene oxide and ethylene oxide. The coating composition further contains a filler selected from the group consisting of lactose and maltodextrin. The plasticizer is at least one member selected from the group consisting of polyethylene glycol, triacetin, di-Bu sebacate, propylene glycol, sorbitol, glycerin and tri-Et citrate.

IT 9005-37-2, Protanal ester SD LB
RL: AGR (Agricultural use); FFD (Food or feed use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(propylene glycol alginate; edible coating composition comprising microcryst. cellulose, carrageenan and at least one of a strengthening polymer, a filler or a plasticizer)

IPCI A61K0009-00 [ICM,7]

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17

IT Coating materials
Coating process
Coloring materials
Confectionery
Dietary supplements
Drugs
Feed
Fillers
Food
Grains (particles)
Human
Pesticides
Pharmaceutical tablets
Plasticizers
Release coatings
Seed
Surfactants
(edible coating composition comprising microcryst. cellulose, carrageenan and at least one of a strengthening polymer, a filler or a plasticizer)

IT Lecithins
RL: AGR (Agricultural use); FFD (Food or feed use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(soya, hydroxylated; edible coating composition comprising microcryst. cellulose, carrageenan and at least one of a strengthening polymer, a filler or a plasticizer)

IT 9005-37-2, Protanal ester SD LB
RL: AGR (Agricultural use); FFD (Food or feed use); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(propylene glycol alginate; edible coating composition comprising

microcryst. cellulose, carrageenan and at least one of a strengthening polymer, a filler or a plasticizer)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L36 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2007:745529 HCAPLUS Full-text
DOCUMENT NUMBER: 147:117226
TITLE: Preparation of microspherical initial bait for fish
INVENTOR(S): Ma, Xiaojun; Xie, Weiyang; Jing, Donghui; Yu, Weiting; Li, Jinyun
PATENT ASSIGNEE(S): Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing, 5pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1989833	A	20070704	CN 2005-10136769	20051230 <--
CN 100594800	C	20100324		
PRIORITY APPLN. INFO.:			CN 2005-10136769	20051230 <--

AB The title preparation of microspherical initial bait for fish comprises mixing starch and water with stirring, heating to 100°C, cooling to 40°C or normal temperature, slowly dissolving sodium alginate to give homologous liquid, adding bait materials and stirring to obtain a viscous solution, spraying the solution to form tiny droplets, gelatinizing by exposing the droplets to water/ethanol solution of CaCl2, separating, drying, grinding, sieving, and packaging. The inventive initial bait has particle size of 50-150 μm. Bait materials such as vitamins, proteins and inorg. salts are protected from influence of heat, water, oxygen, ultra-violet ray and metal ions in processing, storage, transport, and feeding. The initial bait has the advantages of reduced production cost, no pollution for water, and increased survival rate of young fishes. IPCI A23K0001-18 [I,A]; A23K0001-16 [I,A]; A23K0001-10 [I,A]; B01J0002-02 [I,A]
IPCR A23K0001-18 [I,A]; A23K0001-10 [I,A]; A23K0001-16 [I,A]; B01J0002-02 [I,A]
CC 17-12 (Food and Feed Chemistry)
ST fish bait prepn starch sodium alginate microsphere spray
IT Lecithins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(soya; preparation of microspherical initial bait for fish)
IT Granulation
(spray granulation; preparation of microspherical initial bait for fish)
IT 62-49-7, Choline 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9005-38-3, Sodium alginate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(preparation of microspherical initial bait for fish)

L36 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2007:379640 HCAPLUS Full-text
DOCUMENT NUMBER: 146:378641
TITLE: Coated food compositions and related methods of preparation
INVENTOR(S): McClements, David Julian; Decker, Andrew; Weiss, Jochen
PATENT ASSIGNEE(S): University of Massachusetts, USA
SOURCE: PCT Int. Appl., 20pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007038621	A2	20070405	WO 2006-US37716	20060928 <--
WO 2007038621	A3	20070621		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

AU 2006294646	A1	20070405	AU 2006-294646	20060928 <--
CA 2623899	A1	20070405	CA 2006-2623899	20060928 <--
US 20070082094	A1	20070412	US 2006-529044	20060928 <--
EP 1928263	A2	20080611	EP 2006-815591	20060928 <--

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

JP 2009509536	T	20090312	JP 2008-533576	20060928 <--
PRIORITY APPLN. INFO.:			US 2005-721280P	P 20050928 <--
			WO 2006-US37716	W 20060928

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method for protective food coating involves contacting the food (e.g., fruit or vegetables) with at least one of a polymeric component (e.g., proteins or polysaccharides), an emulsifier, a particulate component, and combinations of these. The affinity between the food and the components may comprise electrostatic interaction. Thus, pos. charged protein-coated droplets (lipid droplets coated with whey protein and sodium caseinate) may be absorbed on an agar-carrageenan surface.

IT 9005-32-7, Alginic acid
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(food coating with polymers, emulsifiers, and particulate components)

IPCI A23L0001-00 [I,A]; A23L0001-00 [I,C]; A23L0001-00 [I,A]
IPCR A23L0001-00 [I,A]
CC 17-4 (Food and Feed Chemistry)

IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(fish; food coating with polymers, emulsifiers, and particulate components)

IT Antimicrobial agents
Antioxidants
Cereal (grain)
Coating materials
Electrostatic deposition
Emulsifying agents
Food preservation
Food processing
Fruit
Meat

Nut (seed)
Particles
Surfactants
Vegetable
(food coating with polymers, emulsifiers, and particulate components)
IT Biopolymers
Caseins
Enzymes
Fats and Glyceridic oils
Lecithins
Polysaccharides
Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(food coating with polymers, emulsifiers, and particulate components)
IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(meat; food coating with polymers, emulsifiers, and particulate components)
IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(plant; food coating with polymers, emulsifiers, and particulate components)
IT Fatty acids
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(salts; food coating with polymers, emulsifiers, and particulate components)
IT Caseins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(sodium complexes; food coating with polymers, emulsifiers, and particulate components)
IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(soybean; food coating with polymers, emulsifiers, and particulate components)
IT Proteins
Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(whey; food coating with polymers, emulsifiers, and particulate components)
IT 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-40-2, Locust bean gum 9000-69-5, Pectin 9002-18-0, Agar 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, derivs. 9005-25-8D, Starch, derivs. 9005-32-7, Alginic acid 9012-76-4, Chitosan 34344-66-6D, derivs.
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(food coating with polymers, emulsifiers, and particulate components)

L36 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2006:383865 HCAPLUS Full-text
DOCUMENT NUMBER: 144:419700
TITLE: Oral multilayer tablets adhesive to intestinal mucosa
INVENTOR(S): Takada, Kanji; Ichihashi, Hitoshi
PATENT ASSIGNEE(S): Bioserentach Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006111558	A	20060427	JP 2004-299560	20041014 <--
PRIORITY APPLN. INFO.:			JP 2004-299560	20041014 <--

AB Title tablets (A) contain pharmaceuticals, health foods, or nutrients sensitive to digestive juice or requiring absorption aids, and (B) comprise (1) a bioadhesive layer containing adhesive substance and intestinal absorption enhancer, (2) a water-insol. layer, (3) a coating layer in this order. Thus, core tablets containing Agaricus extract, DK Ester F 140 (surfactant), and Na alginate were coated with water-insol. chitosan granules and overcoated with shellac to give multilayer tablets, which adhered to rat intestinal mucosa with adhesion 3.5 N.

IT 9005-32-7, Alginic acid 9005-37-2, Propylene glycol alginate
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioadhesive multilayer tablets containing pharmaceuticals, health foods, or nutrients)

IPCI A61K0009-36 [I,A]; A61K0047-14 [I,A]; A61K0047-24 [I,A]; A61K0047-26 [I,A]; A61K0047-32 [I,A]; A61K0047-34 [I,A]; A61K0047-36 [I,A]; A61K0047-38 [I,A]; A61K0047-42 [I,A]; A23L0001-29 [N,A]

IPCR A61K0009-36 [I,A]; A23L0001-29 [N,A]; A61K0047-14 [I,A]; A61K0047-24 [I,A]; A61K0047-26 [I,A]; A61K0047-32 [I,A]; A61K0047-34 [I,A]; A61K0047-36 [I,A]; A61K0047-38 [I,A]; A61K0047-42 [I,A]

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17

ST Agaricus ext coated tablet bioadhesive intestinal mucosa; surfactant adhesive alginate shellac coated tablet food nutrient

IT Diglycerides
Flavanols
Glycerides, biological studies
Lecithins
Monoglycerides
Shellac
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioadhesive multilayer tablets containing pharmaceuticals, health foods, or nutrients)

IT 56-81-5D, Glycerin, fatty acid esters 57-55-6D, Propylene glycol, fatty acid esters 79-41-4D, Methacrylic acid, copolymers 541-15-1, Carnitine 5793-94-2, Calcium stearoyllactylate 9003-01-4, Poly(acrylic acid) 9004-32-4, CMC 9004-38-0, Cellulose acetate phthalate 9004-67-5, Methyl cellulose 9004-96-0, Polyethylene glycol monooleate 9004-99-3, Polyethylene glycol monostearate 9005-32-7, Alginic acid 9005-37-2, Propylene glycol alginate 9005-38-3, Sodium alginate 9005-65-6, Polysorbate 80 9050-31-1, Hydroxypropyl methylcellulose phthalate 12441-09-7D, Sorbitan, fatty acid esters 25168-73-4, Ryoto Sugar Ester S 1670 25496-72-4, Monoolein 71138-97-1, Hydroxypropyl methylcellulose acetate succinate 74504-64-6, Ryoto Polyglycerol Ester L 7D 120300-18-7, Ryoto Polyglycerol Ester O 15D 525566-58-9, Yeast Wrap
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioadhesive multilayer tablets containing pharmaceuticals, health foods, or nutrients)

L36 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN

ACCESSION NUMBER: 2004:794556 HCAPLUS Full-text
DOCUMENT NUMBER: 141:301430
TITLE: Microcapsules composed of coating membrane and active substance-containing matrix and method for preparation
INVENTOR(S): Viladot Petit, Josep-Lluis; Asensio, Juan-Antonio
PATENT ASSIGNEE(S): Cognis Iberia, S.L., Spain
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1462157	A1	20040929	EP 2003-6538	20030324 <--
EP 1462157	B1	20090114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 420719	T	20090115	AT 2003-6538	20030324 <--
ES 2321176	T3	20090603	ES 2003-6538	20030324 <--
PRIORITY APPLN. INFO.:			EP 2003-6538 A	20030324 <--

AB The invention concerns microcapsules of 0.0001-5 mm diameter size for pharmaceutical, cosmetic and food industrial applications that are composed of a coating membrane and an active substance-containing matrix; the microcapsules are obtainable by (a1) the preparation of a matrix from gelation agents, anionic polymers and polyethylene glycols; (a2) optionally dispersing the matrix in an oily phase; (a3) treating the dispersed matrix with an aqueous solution of synthetic cationic polymers and optionally removing the oily phase; or (b1) the preparation of a matrix from gelation agents, synthetic cationic polymers and polyethylene glycols; (b2) optionally dispersing the matrix in an oily phase; (b3) treating the dispersed matrix with an aqueous solution of anionic polymers and optionally removing the oily phase. Thus 0.7 g agar was dissolved in 36.3 mL water at b.p. and mixed with 25 g of a solution containing 2 weight/weight% sodium alginate. To the mixture the following were added under vigorous mixing: 15 g polyethylene glycol (MW 200). 0.5 g Phenonip, 10 g glycerin, 2.5 g pigment mixture composed of mica and iron oxide, 10 g mineral oil, 0.16 g tocopherol acetate, and 0.01 carotene palmitate. For encapsulation the matrix was dripped in a 1 weight/weight% aqueous solution of Polyquart 701/N that also contained 0.5% calcium chloride. Medium diameter of the resulting microcapsules was 1 mm.

IPCI B01J0013-02 [I,C]; B01J0013-02 [I,A]
IPCR A23L0001-00 [I,C*]; A23L0001-00 [I,A]; A61K0008-11 [I,C*]; A61K0008-11 [I,A]; A61K0008-72 [I,C*]; A61K0008-73 [I,A]; A61K0008-81 [I,A]; A61K0008-86 [I,A]; A61Q0019-00 [I,C*]; A61Q0019-00 [I,A]; B01J0013-02 [I,C*]; B01J0013-02 [I,A]
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17, 62
IT Antioxidants
Antiperspirants
Cosmetics
Deodorants
Dyes
Gelation agents
Insect repellents
Microcapsules
Molecular weight
Particle size
Perfumes
Sunscreens
Suntanning agents

(microcapsules composed of coating membrane and active substance-containing matrix and method for preparation)
IT Enzymes, biological studies
Lecithins
Paraffin oils
Phospholipids, biological studies
Polyoxyalkylenes, biological studies
Polysiloxanes, biological studies
Waxes
RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcapsules composed of coating membrane and active substance-containing matrix and method for preparation)
IT 58-95-7, Tocopherol acetate 9002-18-0, Agar 9002-98-6 9003-01-4, Polyacrylic acid 9005-38-3, Sodium alginate 16225-34-6 25087-26-7, Polymethacrylic acid 25322-68-3, Polyethylene glycol 29297-55-0D, quaternized derivs. 53694-17-0 133184-01-7 763141-46-4, Polyquart 701N
RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcapsules composed of coating membrane and active substance-containing matrix and method for preparation)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				EP 1284127 A1	HCAPLUS
Anon				GB 1483542 A	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L36 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2004:347975 HCAPLUS Full-text
DOCUMENT NUMBER: 140:356312
TITLE: Lipid-encapsulated functional bakery ingredients
INVENTOR(S): Duesterhoft, Eva-Maria; Minor, Marcel; Nikolai, Karin; Hargreaves, Neil Graham; Huscroft, Simon Christopher; Scharf, Udo
PATENT ASSIGNEE(S): CSM Nederland B.V., Neth.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1413202	A1	20040428	EP 2002-79422	20021022 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CA 2501900	A1	20040506	CA 2003-2501900	20031022 <--
CA 2501900	C	20110906		
WO 2004037004	A2	20040506	WO 2003-NL711	20031022 <--
WO 2004037004	A3	20041021		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,				

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003272150	A1	20040513	AU 2003-272150	20031022	<--
EP 1553840	A2	20050720	EP 2003-754312	20031022	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1705440	A	20051207	CN 2003-80101896	20031022	<--
CN 100539848	C	20090916			
JP 2006503577	T	20060202	JP 2004-546547	20031022	<--
KR 818775	B1	20080402	KR 2005-7007024	20050422	<--
US 20060110494	A1	20060525	US 2005-531767	20051104	<--
PRIORITY APPLN. INFO.:			EP 2002-79422 A	20021022	<--
			WO 2003-NL711 W	20031022	<--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A lipid-encapsulated or lipid-coated functional bakery ingredient consists of a granule suitable for use in the preparation of a dough. The granule comprises (a) a hydrophilic core (≥5 μm diameter) containing a functional bakery ingredient (e.g., enzymes, oxidoreductants, acidulants, hydrocolloids, starches, yeast, sugars, water, flavors, or mixts. of these components); and (b) a lipophilic continuous layer encapsulating the core, which layer contains ≥50 weight% triglyceride-containing fat with a slip m.p. of ≥30° and ≥1 weight% release agent (monoglycerides, diglycerides, datems, lactems, citrems, stearyl lactylates, polyglycerol esters, lecithins, sucrose esters, fatty acids, soaps and or mixts. of these components). Thus, Fungamyl 1600 is coated on a fluidized bed unit by using a fat blend consisting of 90% palm kernel hydrogenated stearins and 10% soy lecithin.

IT 9005-32-7, Alginic acid
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(lipid-encapsulated functional bakery ingredients)

IPCI A21D0008-04 [ICM,7]; A21D0002-02 [ICS,7]; A21D0002-18 [ICS,7]; C12N0009-98 [ICS,7]; A23P0001-04 [ICS,7]; A23L0001-22 [ICS,7]; A23P0001-08 [ICS,7]

IPCR A21D0002-02 [I,A]; A21D0002-14 [I,A]; A21D0002-16 [I,A]; A21D0002-18 [I,A]; A21D0002-22 [I,A]; A21D0002-24 [I,A]; A21D0008-04 [I,A]; A23L0001-00 [I,A]; A23L0001-22 [I,A]; A23P0001-04 [I,A]; A23P0001-08 [I,A]; C12N0009-98 [I,A]

CC 17-11 (Food and Feed Chemistry)

ST lipid encapsulation coating bakery additive granule

IT Acids, biological studies
Carbohydrates, biological studies
Diglycerides
Enzymes, biological studies
Fats and Glyceridic oils, biological studies
Fatty acids, biological studies
Glutens
Lecithins
Lipids, biological studies
Monoglycerides
Soaps
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(lipid-encapsulated functional bakery ingredients)

IT Lecithins
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process);

USES (Uses)
(soya; lipid-encapsulated functional bakery ingredients)
IT 57-50-1, Sucrose, biological studies 57-50-1D, Sucrose, esters 7732-18-5, Water, biological studies 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-40-2, Locust bean gum 9000-69-5, Pectin 9000-90-2, Fungamyl 9000-91-3, β-Amylase 9001-37-0, Glucose oxidase 9001-57-4, Invertase 9001-62-1, Lipase 9003-99-0, Peroxidase 9004-32-4, CMC 9004-65-3, HPMC 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9012-54-8, Cellulase 9025-56-3, Hemicellulase 9029-60-1, Lipoxygenase 9031-11-2, Lactase 9075-68-7, Pullulanase 11138-66-2, Xanthan gum 14440-80-3, Stearyl lactylate 25618-55-7D, Polyglycerol, esters 37278-89-0, Xylanase 50812-17-4, Galactomannanase 60748-69-8, Mannanase 134712-49-5, Ferulic acid esterase
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)
(lipid-encapsulated functional bakery ingredients)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Berlin, O	1999			WO 9908553 A	HCAPLUS
Cottrell, J	1998			WO 9832336 A	
Horn, M	2001			WO 0111975 A	HCAPLUS
Inamine, S	1973			US 3716381 A	
Novozymes As	2001			WO 0125411 A	HCAPLUS
Novozymes As	2002			WO 0219828 A	HCAPLUS
Rhone Poulenc Inc	1996			EP 0699392 A	HCAPLUS
Soo, K	2000			KR 260592 B	
Takeda Chemical Industr	1990			EP 0380066 A	HCAPLUS
Wallace & Tiernan Inc	1970			GB 1190696 A	HCAPLUS

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L36 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2003:836415 HCAPLUS Full-text
DOCUMENT NUMBER: 139:322672
TITLE: Triple-coated confectionery tablet
INVENTOR(S): Clark, James C.; Alexander, Lonnette; Stawski, Barbara Z.; Kures, Vasek J.
PATENT ASSIGNEE(S): Wm. Wrigley Jr. Company., USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030198713	A1	20031023	US 2003-418020	20030417 <--
US 6783783	B2	20040831		
CA 2484106	A1	20031030	CA 2003-2484106	20030417 <--
WO 2003088756	A2	20031030	WO 2003-US11882	20030417 <--
WO 2003088756	A3	20040401		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,

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            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003228566          A1     20031103    AU 2003-228566          20030417 <--
    EP 1496752             A2     20050119    EP 2003-726324          20030417 <--
    EP 1496752             B1     20090617
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    CN 1652692             A      20050810    CN 2003-811224          20030417 <--
    AT 433669              T      20090715    AT 2003-726324          20030417 <--
PRIORITY APPLN. INFO.:                         US 2002-374023P     P   20020419 <--
                                               WO 2003-US11882     W   20030417 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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AB A coated confectionary tablet product has a compressed tablet center; a first coating layer surrounding the tablet and comprising a fat; a second coating layer surrounding the first coating layer and comprising a hard shell made from one or more sugars and polyols; and a third coating layer surrounding the second coating layer and comprising a film containing film-forming agents. Thus, a tableted mint is coated with a compound coating of sugar/fat/milk protein to give a soft coating. The soft-coated product is then sugar coated to give a hard shell and the product is then finished with a film coating. In each of the coating levels flavor, sweeteners, and cooling agents may be added to give the impression of increasing flavor intensity as the tablet is chewed or sucked.

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INCL 426103000
IPCI A23G0001-00 [ICM,7]
IPCR A23G0003-00 [I,A]; A23G0003-34 [I,A]; A23G0003-36 [I,A]; A23G0003-42
     [I,A]; A23G0003-50 [I,A]; A23G0003-54 [I,A]
NCL  426/103.000; 426/303.000; 426/306.000; 426/658.000; 426/660.000
CC   17-6 (Food and Feed Chemistry)
IT   Whey
       (powder; triple-coated confectionery tablet)
IT   Carbohydrates, biological studies
     Fats and Glyceridic oils, biological studies
       Lecithins
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
       (triple-coated confectionery tablet)
IT   50-70-4, Sorbitol, biological studies   50-99-7, Dextrose, biological
     studies   57-50-1, Sucrose, biological studies   69-79-4, Maltose
     87-99-0, Xylitol   89-80-5D, Menthone, ketals   149-32-6, Erythritol
     585-86-4, Lactitol   585-88-6, Maltitol   9000-01-5, Gum arabic
     9004-34-6, Cellulose, biological studies   9005-25-8, Starch, biological
     studies   9005-25-8D, Starch, derivs.   9005-38-3, Sodium alginate
     9049-76-7, Hydroxypropyl starch   9050-36-6, Maltodextrin   17162-29-7,
     Menthyl lactate   64519-82-0   65560-17-0D, derivs.   87061-04-9,
     3,1-Menthoxypropane-1,2-diol   188709-97-9
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
       (triple-coated confectionery tablet)
RETABLE
```

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1987			EP 0212824	
Anon	1989			EP 0298768 A2	HCAPLUS
Anon	1989			EP 0399479 A1	HCAPLUS
Anon	1991			EP 0273000 B1	HCAPLUS
Anon	1991			EP 0433004 A2	HCAPLUS

Anon	1991		EP 0437098 A2	HCAPLUS
Anon	1991		EP 0458750 A1	HCAPLUS
Anon	1995		WO 9512990	HCAPLUS
Anon	1997		WO 9724036	
Anon	1999		EP 0890358 A1	HCAPLUS
Anon	2001		WO 0149270 A2	HCAPLUS
Anon	2001		WO 0180660 A1	HCAPLUS
Belzowski	2001		US 6207207 B1	HCAPLUS
Bruelle	1981		US 4289790 A	HCAPLUS
Cherukuri	1990		US 4971806 A	
Cherukuri	1991		US 4981698 A	
DeStephen	2001		US 6251448 B1	HCAPLUS
Ferrero	1987		US 4684523 A	HCAPLUS
Fritzsching	2002		US 6372271 B1	HCAPLUS
Gallart	2001		US 6221407 B1	
Grillo	1995		US 5470581 A	HCAPLUS
Grillo	2001		US 6183808 B1	HCAPLUS
Hanke	2001		US 6231900 B1	HCAPLUS
Kabse	1995		US 5437879 A	
Lott	2001		US 6245384 B1	HCAPLUS
McCabe	1992		US 5098715 A	HCAPLUS
Minifie, B	1989	165	Chocolate, Cocoa, an	
Monte	1996		US 5578336 A	HCAPLUS
Motegi	1986		US 4623543 A	HCAPLUS
Motoyama	1987		US 4640218 A	
Porter	1988		US 4725441 A	HCAPLUS
Porter	1989		US 4828841 A	HCAPLUS
Ream	2001		US 6290985 B2	HCAPLUS
Ribadeau-Dumas	1999		US 5900261 A	
Rosso	2000		US 6024995 A	HCAPLUS
Russell	1998		US 5827852 A	HCAPLUS
Serpelloni	1996		US 5571547 A	HCAPLUS
Woznicki	1989		US 4802924 A	HCAPLUS
Zamudio-Tena	1989		US 4828845 A	

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L36 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2003:523616 HCAPLUS Full-text
DOCUMENT NUMBER: 139:52074
TITLE: Production of milk substitute for domestic animals
INVENTOR(S): Hagawa, Yoshito; Orihashi, Takenori; Kishimura, Yukimasa; Meguro, Tadato; Kamibe, Michio
PATENT ASSIGNEE(S): Meiji Shiryo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003189799	A	20030708	JP 2001-398346	20011227 <--
PRIORITY APPLN. INFO.:			JP 2001-398346	20011227 <--

AB Fats/oils such as palm stearin (hydrogenated palm oil) and coconut oil mixture (6:4 ratio) produced by mixing ≥ 2 fats/oils with solid fat/oil content (SFC) 15-25 % at 20°, 10-20 % at 25°, and 5-15 % at 30-35°, were sprayed on a powdery milk components such as defatted powdered milk and dried whey, and made into granules to give a milk substitute. The amount of the plant fat/oil is 15-20

% in the granule. Lecithin and polyoxyethylene glycerin fatty acid esters are used as emulsifiers. The product is readily soluble in water, and given to growing domestic animals like calves. IPCI A23K0001-16 [ICM,7]; A23K0001-08 [ICS,7]; A23K0001-20 [ICS,7]
IPCR A23K0001-16 [I,A]; A23K0001-08 [I,A]; A23K0001-20 [I,A]
CC 17-8 (Food and Feed Chemistry)
ST domestic animal feeding milk substitute plant fat oil
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L36 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2003:102704 HCAPLUS Full-text
DOCUMENT NUMBER: 138:105966
TITLE: Preparation of natural antioxidant containing corn yellow pigment
INVENTOR(S): Wang, Hui; Wang, Li; He, Chongyan; Wang, Qing; Zhou, Honglu
PATENT ASSIGNEE(S): Natural Coloring Agent Research Center of Agricultural Sciences Academy, Jilin Province, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing, 7 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1332223	A	20020123	CN 2000-107826	20000623 <--
PRIORITY APPLN. INFO.:			CN 2000-107826	20000623 <--

AB The food antioxidant is prepared by steps: dissolving pectin and filtering, adding sucrose ester and emulsifying at 60-70° and 30-40 MPa, adding tocopherol, cyclodextrin and sodium alginate, homogenizing at 60-70° and 30-40 MPa, spray drying to white microcapsule, then adding lecithin, ascorbic acid and phytic acid into 0.5% citric acid solution, homogenizing at 50-60° and 30-40 MPa for 10-15 min, and spray drying to yellow powders. IPCI C09K0015-34 [ICM,7]; C09B0061-00 [ICS,7]
IPCR C09B0061-00 [I,A]; C09K0015-34 [I,A]
CC 17-6 (Food and Feed Chemistry)
Section cross-reference(s): 41
IT 50-81-7, L-Ascorbic acid, reactions 83-86-3, Phytic acid 9005-38-3, Sodium alginate 12619-70-4, Cyclodextrin
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of natural antioxidant containing corn yellow pigment)

L36 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2000:339459 HCAPLUS Full-text
DOCUMENT NUMBER: 132:333712
TITLE: Stable, rapidly soluble powders and their manufacture for protection of eggs
INVENTOR(S): Kitamura, Akitoshi; Taniguchi, Akiko; Okada, Tomio
PATENT ASSIGNEE(S): Fuji Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2000139334 A 20000523 JP 1998-311517 19981102 <--
PRIORITY APPLN. INFO.: JP 1998-311517 19981102 <--
AB The powders are manufactured by granulating film-forming polymers while spraying them with aqueous emulsions containing polysaccharides, antimicrobial agents, and dispersing agents. The powders show good flowability and solubility and are useful for protection of eggs against fungi and bacteria including Salmonella.
IPCI A23B0005-06 [ICM,7]; A23L0001-32 [ICS,7]; A23L0003-00 [ICS,7]; A23L0003-3562 [ICS,7]; B01J0002-06 [ICS,7]; C08J0003-12 [ICS,7]; C08K0005-00 [ICS,7]; C08L0003-00 [ICS,7]; C08L0005-00 [ICS,7]
IPCR A23B0005-06 [I,A]; A23L0001-32 [I,A]; A23L0003-00 [I,A]; A23L0003-3562 [I,A]; B01J0002-06 [I,A]; C08J0003-12 [I,A]; C08K0005-00 [I,A]; C08L0003-00 [I,A]; C08L0005-00 [I,A]
CC 17-7 (Food and Feed Chemistry)
IT Lecithins
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(dispersants; stable, rapidly soluble powders containing polysaccharides, antimicrobials, and dispersants for egg preservation)
IT 94-13-3, Propyl p-hydroxybenzoate 94-26-8, Butylparaben 120-47-8, Ethyl p-hydroxybenzoate 520-45-6, Dehydroacetic acid 4191-73-5, Isopropylparaben 4247-02-3, Isobutylparaben 9000-01-5, Gum arabic 9004-32-4, CMC sodium salt 9004-53-9, Dextrin 9004-64-2, Hydroxypropyl cellulose 9005-38-3, Sodium alginate 9012-76-4, Chitosan 11138-66-2, Xanthan gum 25104-18-1 28211-04-3, ε-Polylysine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PRP (Properties); BIOL (Biological study); USES (Uses)
(stable, rapidly soluble powders containing polysaccharides, antimicrobials, and dispersants for egg preservation)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L36 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 2000:316773 HCAPLUS Full-text
DOCUMENT NUMBER: 132:321415
TITLE: Powdery nutrient compositions containing gelling agents for dysphagia (difficulty in swallowing) patients
INVENTOR(S): Ito, Mizuki; Iwamura, Sadaki
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000135070	A	20000516	JP 1998-311297	19981030 <--
JP 3781157	B2	20060531		

PRIORITY APPLN. INFO.: JP 1998-311297 19981030 <--
AB The powdery compns., which are made into paste, jellies, sherbet, etc. by controlling amts. of water added, contain (A) proteins and/or their hydrolyzates 5-50, (B) carbohydrates 20-80, (C) fats 5-50, (D) ≥1 gelling agent selected from gelatin, pectin, and alginic acid 1-10, (E) vitamins 0-10, and (F) minerals 0-15%. A spray-dried powder containing soybean oil 20.28, lecithin 0.26, Na caseinate 0.65, Na3PO4 0.03, dextrin 4.78, and gelatin 3.0 g

was mixed with another mixture containing milk proteins 20.0, sucrose 22.0, dextrin 20.4, vitamin mix. 0.1, mineral mix 6.5, and milk flavor 2.0 g to give a powdery nutrient composition The composition (50 g) was dissolved in 120 g H2O, and the solution was cooled or frozen to give a jelly or a sherbet.

IT 9005-32-7, Alginic acid
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(powdery nutrient compns. containing gelling agents for pastes, jellies, sherbet, and for dysphagia (difficulty in swallowing) patients)

IPCI A23L0001-30 [I,A]; A23L0001-05 [I,A]; A61K0031-23 [N,A]; A61K0031-70 [N,A]; A61K0038-00 [N,A]; A61K0047-36 [N,A]; A61K0047-42 [N,A]

IPCR A23L0001-30 [I,A]; A23L0001-05 [I,A]; A61K0031-00 [I,A]; A61K0031-23 [I,A]; A61K0031-70 [I,A]; A61K0038-00 [I,A]; A61K0047-36 [I,A]; A61K0047-42 [I,A]; A61P0003-00 [I,A]; A61P0003-02 [I,A]

CC 18-7 (Animal Nutrition)
Section cross-reference(s): 17, 63

IT 50-81-7, L-Ascorbic acid, biological studies 57-50-1, biological studies 58-56-0 67-03-8 98-92-0, 3-Pyridinecarboxamide 137-08-6 146-17-8, Riboflavin 5'-(dihydrogen phosphate) 1406-16-2, Vitamin D 1406-18-4, Vitamin E 7447-40-7, Potassium chloride (KCl), biological studies 7487-88-9, Sulfuric acid magnesium salt (1:1), biological studies 7647-14-5, Sodium chloride (NaCl), biological studies 9000-69-5, Pectin 9004-53-9, Dextrin 9005-32-7, Alginic acid 10058-44-3 11103-57-4, Vitamin A
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(powdery nutrient compns. containing gelling agents for pastes, jellies, sherbet, and for dysphagia (difficulty in swallowing) patients)

L36 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 1995:922091 HCAPLUS Full-text
DOCUMENT NUMBER: 123:312675
ORIGINAL REFERENCE NO.: 123:56039a,56042a
TITLE: Formulation of microparticles comprising an alginate core coated with an emulsifier, as fat substitute.
INVENTOR(S): Profeiro, Neil
PATENT ASSIGNEE(S): Kelco International Ltd., UK
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9524833	A1	19950921	WO 1995-EP948	19950314 <--
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9520705	A	19951003	AU 1995-20705	19950314 <--
PRIORITY APPLN. INFO.:			GB 1994-4989 A	19940315 <--
			WO 1995-EP948 W	19950314 <--

AB The invention relates to microparticles comprising an alginate core and an emulsifier. The emulsifier provides a hydrophobic coating around the alginate core. A formulation comprises the microparticles in an aqueous medium. The formulation can be used in the preparation of low calorie comestible products, as a fat replacement. A slurry was made, at 70°, of Na alginate 1, Ca sulfate 0.25, glyceryl monostearate 3, and water 95.75%. The slurry was cooled, added to water, heated, and sheared to pastry consistency, to give a fat substitute.

IT 9005-32-7D, Alginic acid, salts
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(formation of emulsifier-coated alginate microparticles, as fat substitute.)
IPCI A23L0001-0532 [ICM,6]; A23L0001-035 [ICS,6]
IPCR A23G0003-34 [I,A]; A23L0001-035 [I,A]; A23L0001-0532 [I,A]
CC 17-9 (Food and Feed Chemistry)
ST microparticle alginate core emulsifier fat substitute
IT Fat substitutes
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(formation of emulsifier-coated alginate microparticles)
IT Emulsifying agents
(formation of emulsifier-coated alginate microparticles, as fat substitute.)
IT Glycerides, biological studies
Lecithins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(formation of emulsifier-coated alginate microparticles, as fat substitute.)
IT 9005-32-7D, Alginic acid, salts 9005-38-3, Sodium Alginate 31566-31-1, Glyceryl monostearate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(formation of emulsifier-coated alginate microparticles, as fat substitute.)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				WO 9119424 A1	HCAPLUS
Anon				WO 9319613 A1	HCAPLUS
Anon				WO 9321784 A1	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L36 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 1994:7312 HCAPLUS Full-text
DOCUMENT NUMBER: 120:7312
ORIGINAL REFERENCE NO.: 120:1643a,1646a
TITLE: Encapsulated dietary fatty acid salt products for use as rumen bypass animal feed supplements
INVENTOR(S): Lajoie, M. Stephen; Cummings, Kenneth R.
PATENT ASSIGNEE(S): Church and Dwight Co., Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9318667	A1	19930930	WO 1993-US306	19930126 <--
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9334721	A	19931021	AU 1993-34721	19930126 <--
US 5874102	A	19990223	US 1993-40911	19930330 <--
PRIORITY APPLN. INFO.:			US 1992-853965 A	19920320 <--
			WO 1993-US306 A	19930126 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Dietary fatty acid salt products comprising encapsulated granules containing a core matrix of ≥1 C14-22 fatty acid salt of an alkaline earth metal and a polymeric coating in the form of a continuous film are described. This product can be used as a rumen bypass animal feed supplement which is essentially free of unpleasant odors. Thus, core matrix granules were prepared by mixing CaO, Na2CO3, and palm fatty acid distillate with an aqueous suspension medium containing soy bean meal, soy lecithin, tricalcium phosphate, trace minerals, and vitamin A. A coating suspension containing EtOH, 2-vinylpyridine-styrene copolymer, Al powder, talc powder, and stearic acid was used to coat such granules.

IPCI A23K0001-18 [ICM,5]

IPCR A23K0001-00 [I,A]; A23K0001-16 [I,A]

CC 17-12 (Food and Feed Chemistry)

ST dietary fatty acid salt encapsulated; rumen bypass animal feed supplement

IT Antibiotics
Nutrients
Pharmaceuticals
Amino acids, biological studies
Trace elements, biological studies
Vitamins
RL: PREP (Preparation)
(encapsulated granules of fatty acid alkaline earth salts containing, preparation
for use as rumen bypass animal feed supplements of)

IT Polymers, biological studies
Polysaccharides, biological studies
Proteins, biological studies
RL: PREP (Preparation)
(granules of fatty acid alkaline earth salts encapsulated with, preparation for
use as rumen bypass animal feed supplements of)

IT Fatty acids, compounds
RL: PREP (Preparation)
(C14-22, alkaline earth salts, polymer-encapsulated granules of, preparation for
use as rumen bypass animal feed supplements of)

IT Fatty acids, compounds
RL: PREP (Preparation)
(C14-22, calcium salts, polymer-encapsulated granules of, preparation for use as rumen bypass animal feed supplements of)

IT Alkali metals, compounds
RL: PREP (Preparation)
(compds., basic, encapsulated granules of fatty acid alkaline earth salts containing, preparation for use as rumen bypass animal feed supplements of)

IT Fatty acids, biological studies
RL: PREP (Preparation)
(palm-oil, encapsulated granules of, preparation for use as rumen bypass animal feed supplements of)

IT 63-68-3D, Methionine, hydroxy analog 497-19-8, Sodium carbonate, biological studies 584-08-7, Potassium carbonate 7440-09-7D, Potassium, compds. 7440-23-5D, Sodium, compds. 11103-57-4, Vitamin A
RL: BIOL (Biological study)
(encapsulated granules of fatty acid alkaline earth salts containing, preparation
for use as rumen bypass animal feed supplements of)

IT 148850-95-7
RL: BIOL (Biological study)
(encapsulated granules of, preparation for use as rumen bypass

animal feed supplements of)
IT 24980-54-9, 2-Vinylpyridine-styrene copolymer
RL: BIOL (Biological study)
(granules of fatty acid alkaline earth salts encapsulated with, preparation for
use as rumen bypass animal feed supplements of)
IT 7440-70-2D, Calcium, salts with C14-22 fatty acids
RL: BIOL (Biological study)
(polymer-encapsulated granules of, preparation for use as rumen bypass animal feed supplements of)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 4595584 A	HCAPLUS
Anon				US 4642317 A	HCAPLUS
Anon				US 4876097 A	HCAPLUS
Anon				US 4877621 A	HCAPLUS
Anon				US 4996067 A	

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L36 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 1989:495931 HCAPLUS Full-text
DOCUMENT NUMBER: 111:95931
ORIGINAL REFERENCE NO.: 111:16121a,16124a
TITLE: Vitamin-containing feed additives for ruminants
INVENTOR(S): Sasaoka, Seiji; Takenaka, Shinji; Asai, Makoto; Sadamoto, Katsutoshi; Kanehara, Hironori
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63294747	A	19881201	JP 1987-128049	19870527 <--
JP 07020422	B	19950308		
PRIORITY APPLN. INFO.:			JP 1987-128049	19870527 <--

AB Title additives contain (a) fat-soluble vitamins; (b) ≥1 compound selected from C12-24 linear or branched (un)saturated aliphatic monocarboxylic acids and hydrogenated vegetable or animal oils; (c) chitosan and/or essential amino acids; and (d) lecithins and/or glycerides. Thus, a slurry containing hydrogenated beef tallow oil 680, CaCO3 300, chitosan 20, vitamin A palmitate 19.1, vitamin D3 0.375, vitamin E 20, soybean lecithin 50, and glycerin monostearate 50 g was sprayed and cooled to give granular feed additive, which showed vitamin A palmitate and vitamin D3 retentions of 94.3 and 92.3%, resp., after 70-day storage and good vitamin release in a model stomach of a ruminant. IPCI A23K0001-18 [ICM,4]; A23K0001-16 [ICS,4]
IPCR A23K0001-18 [I,A]; A23K0001-16 [I,A]
CC 17-12 (Food and Feed Chemistry)
Section cross-reference(s): 18
IT Oils, glyceridic
RL: BIOL (Biological study)
(animal, hydrogenated, feed additives containing fat-soluble vitamins and, for ruminants)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

L36 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2012 ACS on STN
ACCESSION NUMBER: 1988:637067 HCAPLUS Full-text
DOCUMENT NUMBER: 109:237067
ORIGINAL REFERENCE NO.: 109:39113a,39116a
TITLE: Preparation of water-dispersible phosphatidylcholine-enriched lecithin powders
INVENTOR(S): Hibino, Hidehiko; Fukuda, Nobuo; Nakachi, Osamu
PATENT ASSIGNEE(S): Nippon Oils & Fats Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63185929	A	19880801	JP 1987-17873	19870128 <--
PRIORITY APPLN. INFO.:			JP 1987-17873	19870128 <--

AB Water-dispersible lecithin powders, useful as drugs and foods for treatment of fatty liver and hypercholesterolemia, are prepared by homogenizing 50-90% concentrated lecithins (containing ≥80% phosphatidylcholines) dispersed in equal or less amts. of oils and fats, 10-50% coating materials (comprising H2O-soluble proteins, H2O-soluble sugars, and cellulose) dispersed in H2O, thickening agents, and emulsifying agents, followed by spray-drying. A homogenized solution comprising 120 g Na caseinate, 40 g microcryst. cellulose, and 6 L H2O was mixed with a solution comprising 4 g trisodium phosphate, 800 g Na caseinate, and 10 L H2O, and with 4 g Na alginate, 40 g sucrose fatty ester, and 320 g dextrin at ≥ 80° for 30 min, homogenized with a solution of 1680 g concentrated lecithin (containing ≥80% phosphatidylcholines) dispersed in 1120 g vegetable oil at ≥80° for 30 min, and spray-dried to give 2.6 kg powder (average particle size 20-50 μm). When 10 g the powder was mixed with 100 mL H2O at 40°, a low-viscosity emulsion was obtained. An emulsified drink was prepared from skim milk, the powder, and H2O.
IPCI A61K0031-685 [ICM,4]; A61K0009-14 [ICS,4]; C07F0009-10 [ICS,4]
IPCR A61K0031-683 [I,C*]; A61K0031-685 [I,A]; A23J0007-00 [I,C*]; A23J0007-00 [I,A]; A61K0009-14 [I,C*]; A61K0009-14 [I,A]; C07F0009-00 [I,C*]; C07F0009-10 [I,A]
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17
ST phosphatidylcholine lecithin powder drug food; protein sugar cellulose coating lecithin
IT Phosphatidylcholines, biological studies
RL: BIOL (Biological study)
(lecithins containing enriched, powder, coated with protein and sugar and cellulose, water-dispersible)
IT Carbohydrates and Sugars, biological studies
RL: PREP (Preparation)
(phosphatidylcholine-enriched lecithin coated with protein and cellulose and, in preparation of water-dispersible powder)
IT Proteins, biological studies
RL: PREP (Preparation)
(phosphatidylcholine-enriched lecithin coated with sugar and cellulose and, in preparation of water-dispersible powder)
IT Food
(phosphatidylcholine-enriched lecithin powders in, water-dispersible)

IT Fats, biological studies
Oils, glyceridic
RL: PREP (Preparation)
(phosphatidylcholine-enriched lecithins dispersed in, in preparation of water-dispersible powders)
IT Lecithins
RL: BIOL (Biological study)
(phosphatidylcholine-enriched, powder, coated with protein and sugar and cellulose, water-dispersible)
IT Pharmaceutical dosage forms
(powders, phosphatidylcholine-enriched lecithins as, water-dispersible)
IT Caseins, compounds
RL: PREP (Preparation)
(sodium complexes, phosphatidylcholine-enriched lecithin coated with sugar and cellulose and, in preparation of water-dispersible powder)
IT Oils, glyceridic
RL: PREP (Preparation)
(vegetable, phosphatidylcholine-enriched lecithins dispersed in, in preparation of water-dispersible powders)
IT 57-50-1D, Sucrose, esters with fatty acids 7601-54-9, Trisodium phosphate 9005-38-3, Sodium alginate
RL: BIOL (Biological study)
(in preparation of phosphatidylcholine-enriched lecithin powder with good water-dispersibility)
IT 9004-53-9, Dextrin
RL: BIOL (Biological study)
(phosphatidylcholine-enriched lecithin coated with protein and cellulose and, in preparation of water-dispersible powder)
IT 9004-34-6, Cellulose, biological studies
RL: USES (Uses)
(phosphatidylcholine-enriched lecithin coated with protein and sugar and, in preparation of water-dispersible powder)

=> FILE AGRICOLA, ESBIOBASE, FSTA, FROSTI, LIFESCI
FILE 'AGRICOLA' ENTERED AT 15:03:05 ON 06 FEB 2012

FILE 'ESBIOBASE' ENTERED AT 15:03:05 ON 06 FEB 2012

FILE 'FSTA' ENTERED AT 15:03:05 ON 06 FEB 2012

FILE 'FROSTI' ENTERED AT 15:03:05 ON 06 FEB 2012

FILE 'LIFESCI' ENTERED AT 15:03:05 ON 06 FEB 2012

=> D L107 1-3 ALL

L107 ANSWER 1 OF 3 FSTA COPYRIGHT 2012 IFIS on STN
AN 2006:J1865 FSTA Full-text
TI [Process for instantizing of coconut milk powder.]
IN Steiger, D.
PA Degussa Texturant Systems Deutschland GmbH & Co. KG; Degussa Texturant Systems, 20539 Hamburg, Germany
SO German Federal Republic Patent Application, (2006)

PI DE 102004038910 A1
PRAI DE @@@@-102004038910 20040811
DT Patent
LA German
AB A process is described for instantizing powders with free surface fat, especially coconut milk powder, based on spraying an aqueous solution containing lecithin and alginate onto the powder, which is then dried.
CC J (Fruits, Vegetables and Nuts)
CT COCONUTS; DRIED FOODS; INSTANT FOODS; PATENTS; PROCESSING; COCONUT MILK; INSTANTIZATION; POWDERS

L107 ANSWER 2 OF 3 FROSTI COPYRIGHT 2012 LFRA on STN
AN 746501 FROSTI Full-text
TI Method for the instantization of powders, particularly of coconut milk powder.
IN Steiger D.; Stoffels I.; Knickrehm I.
PA Degussa Texturant Systems Deutschland GmbH and Co. KG
SO European Patent Application
PI EP 1901614 A1 20080326
WO 2008009297 20080124
AI 20050809
PRAI Germany, Federal Republic of 20040811
NTE 20080326
DT Patent
LA German
SL German
AB The patent relates to an instantisation method for powders, particularly coconut milk powder, for use in foods and animal feeds. The particles have free surface fat. An aqueous solution of lecithin and alginate are sprayed onto the powder particles, which are then dried.
SH ADDITIVES
CT COCONUT MILK; COCONUT PRODUCTS; EUROPEAN PATENT; PATENT; POWDERS; VEGETABLE MILKS; VEGETABLE PRODUCTS
DED 7 Apr 2008

L107 ANSWER 3 OF 3 FROSTI COPYRIGHT 2012 LFRA on STN
AN 744353 FROSTI Full-text
TI Method for the instantization of powders, particularly of coconut milk powder.
IN Steiger D.; Stoffels I.; Knickrehm I.
PA Degussa Texturant Systems Deutschland GmbH and Co. KG
SO PCT Patent Application
PI WO 2008009297 A1 20080124
AI 20050809
PRAI Germany, Federal Republic of 20040811
NTE 20080124
DT Patent
LA German
SL English; German
AB The patent relates to an instantisation method for powders, particularly coconut milk powder, for use in foods and animal feeds. The particles have free surface fat. An aqueous solution of lecithin and alginate are sprayed onto the powder particles, which are then dried.
SH ADDITIVES
CT COCONUT MILK; COCONUT PRODUCTS; PATENT; PCT PATENT; POWDERS; VEGETABLE MILKS; VEGETABLE PRODUCTS
DED 7 Mar 2008